

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-103-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Local
04 City	LIGHTNING CREEK TOWN	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LIGHTNING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	10 SOUTH 1 EAST REEDER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 57' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 56' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	194772.5 5097108.5	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden -		70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1996 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	August 07, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	– -1 01/01/1901
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	DPI 0036(002)011
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Strand
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
DOUBLE 11' X 9' X 50' PRECAST RCB			

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Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	100	100	100	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes: _										

Remarks: MINOR CRACKING ON PARAPET. SW WING HAS MINOR CRACKING. 11-7-2013 Fenceline North side full of debris blocking flow to East opening. 8/7/17 - NW wing has minor cracking.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-104-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	67.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Major Collector
04 City	WHETSTONE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	12 NORTH OF REEDER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 16' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 55' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	197460.5 5132670.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	B Posting Recommended
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 26 47 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 11 20 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	2 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1931 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	35 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	7 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 16, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.0 Ft.	Other Special	N
48 Length of Max Span	70 Ft.	218 Channel Profile	1 48 07/25/2017
49 Structure Length	75.13 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	22.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Eslinger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,647	80	1,315	20	332	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	82	0	0	100	82	0	0	0	0
Notes:Transverse cracking over entire deck. - 8/16/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	250	0	0	100	250	0	0	0	0
Notes:There is abrasion on the deck mostly in the wheel paths. - 8/16/2019										
107/1:Steel Opn Girder/Beam	ft	299	0	0	100	299	0	0	0	0
1000/1:Corrosion	ft	299	0	0	100	299	0	0	0	0
Notes:Steel rusted over all girders. - 8/16/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Paint faded and chipped w/ exposed steel over 90% of the girders. - 8/16/2019										
215/1:Re Conc Abutment	ft	49	59	29	41	20	0	0	0	0
1120/1:Efflorescence/Rust Staining	ft	10	0	0	100	10	0	0	0	0
Notes:There is efflorescent staining at the cracks. - 8/16/2019										
1130/1:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:There are 4 fairly large cracks on the abutments. 2 each side. - 8/16/2019										
311/1:Moveable Bearing	each	4	0	0	100	4	0	0	0	0
2220/1:Alignment	each	4	0	0	100	4	0	0	0	0
Notes:Rocker bearings are tilted to the SW 1 1/4" - 8/16/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Bearing devices are dirty and rusted. - 8/16/2019										
313/1:Fixed Bearing	each	4	0	0	75	3	0	0	25	1
1000/1:Corrosion	each	3	0	0	100	3	0	0	0	0
Notes:Bearing devices are dirty and rusted. - 8/16/2019										
2210/1:Movement	each	1	0	0	0	0	0	0	100	1
Notes:NW fixed bearing has been pushed of the fixed bearing due to movement. - 8/16/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:The bearing pads are dirty and rusted. - 8/16/2019										
330/1:Metal Bridge Railing	ft	151	0	0	95	143	5	8	0	0
1000/1:Corrosion	ft	143	0	0	100	143	0	0	0	0
Notes:The bridge rail is showing signs of rust forming along the runs. - 8/16/2019										
7000/1:Damage	ft	8	0	0	0	0	100	8	0	0
Notes:Traffic impact scraping on one section of the rail. - 8/16/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3410/1:Chalk(Steel Protect Coatings)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Much of the bridge rail is showing loss of pigment of peeling of the paints. - 8/16/2019										
331/1:Re Conc Bridge Railing	ft	151	50	76	50	75	0	0	0	0

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1190/1:Abrasion(PSC/RC)	ft	75	0	0	100	75	0	0	0	0
Notes:There is abrasion covering most of the concrete bridge rail. - 8/16/2019										
8398/1:Slope Protection	each	1	0	0	0	0	0	0	100	1
4000/1:Settlement	each	1	0	0	0	0	0	0	100	1
Notes:The Slope protection is mostly gone. - 8/16/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 1/24/2008 - Four large cracks on the abutments. Slope protection mostly gone. NBI Remarks: Transverse cracking over entire deck. Bearing devices dirty & rusted. East abutment has come against beams this caused one beam to be pushed off bearing plate. Rockers tilted to the SW one & one fourth inches. One and one half inch space between beams and backwall on southwest abutment. Ice damage to angle iron diaphragm second one from east. Paint faded chip and steel rusted on 90 percent of bridge. Two inches gravel across bridge deck January 2008. Abutments have cracking and staining. 8/21/17 - No signs for posted weight. - 8/16/2019

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Structure Number: 01-104-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	18.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Local
04 City	LIGHTNING CREEK TOWN	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BUFFALO CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	7 SOUTH 2 EAST REEDER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 59' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 54' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	197020.2 5100981.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	3 Serious
99 Border Bridge Struct No.	–	59 Superstructure	2 Critical
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	3 Bank Prot Failed
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 0 0 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 0 0 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	12 Tons
Age and Service		Appraisal	
27 Yr Built	1919 106 Yr Reconstructed -1	67 Structural Condition	0 Closed
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	7 Above Minimum
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	3 Intolerable - Correct
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 08, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 09/02/2015
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	15.1 Ft.	Other Special	N
48 Length of Max Span	45 Ft.	218 Channel Profile	N
49 Structure Length	45.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	15.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	15.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Martin
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 01-104-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St

Remarks: 9/4/2007 - Structure Closed. NBI Remarks: 2 bridge end markers up. Rail on structure which is bent and pushed out. Stringers rusted and corroded. Poor channel alignment. Poor roadway alignment both directions of structure curves and no tangent lengths. Abutments deteriorating, spalling, and settling. Deck and curb show signs of cracking with north east underside of deck spalling out with steel showing. All gussets on west side are damaged from ice. Sway braces gone from 2 south sections ne corner of truss is twisted at bearing. Bridge closed 9/2007. Still closed 1/2008. Still closed 2010. 09/06/2011 - Bridge still closed. 11-7-2013 Bridge closed see picture. 9-2-2015 BRIDGE CLOSED 8/7/17 - Bridge remains closed 8/8/19- bridge remains closed, see archive pictures for any structural views. Bridge has been closed for 12 years now with no change, recommend removal from inspection list per bridge manual. - 8/8/2019

Alert Code 2: Settlement of the n.W. Corner of abutment is 8 inches. Causing deck to break on the corner. 1 to 2 feet of concrete deterioration on south abutment, see pictures. - 8/8/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-105-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	49.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Local
04 City	WHETSTONE TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CEDAR CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	2 EAST 11 NORTH REEDER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 16' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 53' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	200137.0 5131610.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 17 30 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 11 21 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	20 Tons
Age and Service		Appraisal	
27 Yr Built	1936 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	6 Equal Minimum
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	7 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 16, 2019
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	13.8 Ft.	Other Special	N
48 Length of Max Span	32 Ft.	218 Channel Profile	1 48 07/25/2017
49 Structure Length	57.09 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	14.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Brown
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 01-105-02.0

[illegible]

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Structure Number: 01-105-02.0

Remarks: NBI Remarks: Rail on structure bent & pushed out. Stringers rusted and corroded. Minor undermining north & south abutment. South abutment wingwalls are cracked. East side of pier 2 has broken off held in place with wire. West stringer of span 2 is spliced at center and bent. 09/08/2011 - Embankment erosion around south wingwalls. Diaphragm concrete is spalling at abuts and pier. East 2 stringers of span 2 are bent. 8/16-19 - load limit signs are different from each other one is 15 ton the other is 20 ton see pictures. NW wing is broken completely through near end, slope protection is mostly gone w/ exposed footing on north abutment & north side of pier. timber bridge rail is in place for the most part w/ the sw end having a large piece broken half off. - 8/16/2019

Alert Code 2: Pier 2 has concrete delamination and spalling with exposed rebar. - 8/16/2019

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SEC 409

Structure Number: 01-105-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Local
04 City	LIGHTNING CREEK TOWN	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BUFFALO CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 SOUTH 1 EAST OF REEDER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 59' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 54' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	197490.1 5100190.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2012 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	August 07, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	52.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	44.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	12/05/2012
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-000(050)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Strand
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE 14 X 10 X 52' PRCBC		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-105-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	104	100	104	0	0	0	0	0	0
Notes:_										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/2012 - BRIDGE REPLACED WITH A BOX.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-106-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	23.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Local
04 City	LIGHTNING CREEK TOWN	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BUFFALO CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	9 SOUTH 2 EAST REEDER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 58' 27.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 53' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	198512.1 5098535.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	3 Serious
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 0 0 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 0 0 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	13 Tons
Age and Service		Appraisal	
27 Yr Built	1919 106 Yr Reconstructed -1	67 Structural Condition	0 Closed
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	7 Above Minimum
29 ADT	1 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 08, 2019
32 Approach Roadway Width	10 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 08/08/2019
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	15.4 Ft.	Other Special	N
48 Length of Max Span	45 Ft.	218 Channel Profile	0 0 10/10/2013
49 Structure Length	45.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	15.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Martin
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-106-22.0

Structure Number: 01-106-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	700	34	241	37	259	29	200	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	459	0	0	56	259	44	200	0	0
Notes:Deck is has abrasion on 100% of it to varying degree and is starting to deteriorate. - 8/8/2019										
113/1:Steel Stringer	ft	404	0	0	0	0	100	404	0	0
1000/1:Corrosion	ft	404	0	0	0	0	100	404	0	0
Notes:100% of the stringers are corroded. - 8/8/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Failed no paint. - 8/8/2019										
120/1:Steel Truss	ft	89	0	0	0	0	100	89	0	0
1000/1:Corrosion	ft	89	0	0	0	0	100	89	0	0
Notes:100% of the truss is corroded. - 8/8/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:failed no paint. - 8/8/2019										
152/1:Steel Floor Beam	ft	33	0	0	0	0	100	33	0	0
1000/1:Corrosion	ft	33	0	0	0	0	100	33	0	0
Notes:100% corrosion to varying degree. - 8/8/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:failed. - 8/8/2019										
215/1:Re Conc Abutment	ft	39	0	0	0	0	31	12	69	27
1090/1:Exposed Rebar	ft	12	0	0	0	0	100	12	0	0
Notes:Exposed and debonded rebar - 8/8/2019										
4000/1:Settlement	ft	27	0	0	0	0	0	0	100	27
Notes:concrete deteriorated to the point where it is now settling. - 8/8/2019										
330/1:Metal Bridge Railing	ft	89	0	0	0	0	55	49	45	40
1020/1:Connection	ft	89	0	0	0	0	55	49	45	40
Notes:Railing is not connected in most places, county removed some of it to weld across the structure to keep it closed. - 8/8/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:failed. - 8/8/2019										
331/1:Re Conc Bridge Railing	ft	89	0	0	0	0	39	35	61	54
1080/1:Delamination/Spall/Patched Area	ft	89	0	0	0	0	39	35	61	54
Notes:100% of the concrete railing is deteriorated to some degree. - 8/8/2019										
8401/1:Wings	each	4	0	0	75	3	0	0	25	1
1130/1:Cracking (RC and Other)	each	1	0	0	0	0	0	0	100	1
Notes:NE wing cracked and falling in. - 8/8/2019										
1190/1:Abrasion(PSC/RC)	each	3	0	0	100	3	0	0	0	0

Structure Number: 01-106-22.0

Notes: All remaining wings wearing to the point of being un functional. - 8/8/2019

Remarks: 9/11/2007 - South curb concrete deteriorated and crumbling. Steel exposed. NBI Remarks: No bridge markers are up. Stringers rusted and corroded. Bottom lateral bent disconnected. One hundred percent of steel badly rusted and no paint on structure. Structure and roadway are fenced off on east side. Concrete curb is deteriorating, steel exposed. Bottom layer of metal under deck is badly rusted and has many areas that have deteriorated. Minor section loss of most rivet heads. 05/02/2012 Bridge closed by county. 11/20/2012 - Bridge closed signs in place on each end of bridge. 7-20-2013 Bridge still closed. 5/2016 - Bridge closed. 8/7/17 - Bridge remains closed. County removed metal bridge rail to weld across opening on either side & hung the road closed signs on. 8-8-19-Remains closed. Recommend removal from inspection listing unless replaced. It is getting extremely difficult to even get to this structure anymore and has been closed for 7 years with nothing being done to it. - 8/8/2019

Alert Code 1: STRINGERS RUSTED AND CORRODED. PROTECTIVE GALVANIZED LAYER FAILING, THUS CAUSING RUSTING ON CORRAGATED STEEL SHEETING UNDER DECK. ALL STEEL HAS MODERATE RUSTING. PLATES BENT AT U1,L1 AND U2,L2 ON NORTH SIDE, BOTTOM. CONCRETE SPALLED AT ALL 4 CORNERS WHERE WINGS TIE IN. - 8/8/2019

Alert Code 2: CURB & GUTTER SEVERELY DETERIORATED WITH EXPOSED REBAR. - 8/8/2019

Alert Code 3: EAST ABUTMENT HAS SEVERE CONCRETE DETERIORATION WITH EXPOSED & DEBONDED REBAR. CONCRETE BELOW WATER LINE SEVERLY DETERIORATED AT BOTH ABUTMENTS. 8/7/17 - East abutment failing where connected to wing NE side. - 8/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-110-11.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Major Collector
04 City	WOLF BUTTE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00111 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DUCK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 NORTH OF BUCYRUS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	4.999	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 08' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 47' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	207403.4 5116090.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2017	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 07, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CRS-0111(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Strand
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10X6X42' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-110-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	125	96	120	4	5	0	0	0	0
1130/2:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: 11-14-2013 Cracks & Delamination at both east side parapet wing intersections. NW wing parapet intersection cracked. 11-14-2013 Cracking on both parapets. 11-14-2013 SE inner wall has crack 2' into box, delamination & spalling near top of wall.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-110-16.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Major Collector
04 City	WOLF BUTTE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00111 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	BUCYRUS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 03' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 47' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	207044.4 5108358.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2007 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	August 07, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	AC-HPP-NH-5-012(031)054
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Strand
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12'X 4'X 50' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-110-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: _

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-111-03.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Major Collector
04 City	DARLING SPRINGS TOWN	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00111 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 16 NORTH HETTINGER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	13.397	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 14' 60.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 46' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	209193.0 5128740.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 30 54 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 18 32 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	7 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	39 Ft.	Other Special	N
49 Structure Length	107.94 Ft.	218 Channel Profile	1 48 07/25/2017
50 Curb/Sidewalk Widths	1.6 Ft Rt-Side	Chaining Date	None
	1.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	09/19/2017
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	CBRS-0111(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Brown
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-111-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,025	98	2,975	2	50	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	50	0	0	100	50	0	0	0	0
Notes:Middle driving portion of the deck is showing wear / abrasion. - 8/21/2019										
104/1:Pre Clsd Box Girder	ft	433	100	433	0	0	0	0	0	0
1110/1:Cracking (PSC)	ft	5	100	5	0	0	0	0	0	0
Notes:south beam of east pier has a hairline crack - 8/21/2019										
210/1:Re Conc Pier Wall	ft	59	100	59	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	217	100	217	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0
Notes:minor erosion behind wing s e/ minor scour beginning behind n e wing - 8/21/2019										

Remarks: 9-2-2015 OUTSIDE SOUTH BEAM OF EAST PIER HAS A HAIRLINE CRACK. 8/3/17 - Minor scouring beginning @ NE wing. 8-21-19- minor erosion behind s e wing - 8/21/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-111-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	33.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Local
04 City	WOLF BUTTE TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DUCK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 NORTH 1 EAST OF BUCYRUS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 08' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 46' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	208708.0 5115786.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 20 36 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 14 26 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	08 Tons
Age and Service		Appraisal	
27 Yr Built	1935 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 21, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.1 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 07/25/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	16.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Brown
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 01-111-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	409	0	0	0	0	100	408	0	1
1140/1:Decay/Section Loss	sq.ft	409	0	0	0	0	100	408	0	1
Notes:deck planks not sitting on most of south side. hole through deck measuring 4" wide on east side - 8/21/2019										
107/1:Steel Opn Girder/Beam	ft	200	0	0	90	180	10	20	0	0
1000/1:Corrosion	ft	180	0	0	100	180	0	0	0	0
Notes:100% of the girders have started to corrode. - 8/21/2019										
1900/1:Distortion	ft	20	0	0	0	0	100	20	0	0
Notes:south outside c-iron stringer bowed out deck planking not sitting on most of the south side. North outside c-iron bowed in. - 8/21/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Failed, no paint and metal starting to corrode. - 8/21/2019										
215/1:Re Conc Abutment	ft	30	0	0	0	0	0	0	100	30
1080/1:Delamination/Spall/Patched Area	ft	15	0	0	0	0	0	0	100	15
Notes:concrete deterioration on both abutments. - 8/21/2019										
1090/1:Exposed Rebar	ft	15	0	0	0	0	0	0	100	15
Notes:exposed rebar and piling both abutments. - 8/21/2019										
8401/1:Wings	each	4	0	0	0	0	0	0	100	4
1080/1:Delamination/Spall/Patched Area	each	4	0	0	0	0	0	0	100	4
Notes:All 4 wings have extreme deterioration and exposed rebar. - 8/21/2019										

Remarks: NBI Remarks: No curb or railing on bridge. South outside c-iron stringer bowed out. 09/08/2011 - North outside c-iron stringer bowed. 09/08/2011 - Deck planks not sitting on most of south side. 1-9-2014 Cattle panel across east half on north side. 8/7/17 - Hole through the deck measuring 4" in width on the East side. 8-21-19- talked to farmer that lives just east . only road in and out of area. he stated that a lot of hay and cattle are hauled over this bridge in semis more than likely exceeding the posted weight limit. - 8/21/2019

Alert Code 2: . - 8/21/2019

Alert Code 3: Concrete deterioration on abutments exposing rebar and piling. Wings have concrete deterioration and exposed rebar. 8-21-19 changed from alert code 2 after talking to land owner. - 8/21/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-113-02.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Major Collector
04 City	CEDAR TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00115 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CHANTA PETA CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	18 NORTH 5 WEST HETTINGER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	20.096	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 16' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 43' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	212901.8 5131498.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 50 90 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 29 54 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	August 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	82.02 Ft.	218 Channel Profile	1 48 07/25/2017
50 Curb/Sidewalk Widths	1.6 Ft Rt-Side	Chaining Date	None
	1.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	09/21/2017
52 Deck Width	31.5 Ft.	213 Federal Aid Project Number	CBRS-115(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Brown
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 01-113-02.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	656	99	650	1	6	0	0	0	0
1110/1:Cracking (PSC)	ft	656	99	650	1	6	0	0	0	0
Notes:Cracking on outside of beams where they meet over the pier on both sides. - 8/21/2019										
210/3:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	56	96	54	4	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Minor spalls where beams tie into abutments. - 8/21/2019										
331/1:Re Conc Bridge Railing	ft	164	99	163	1	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	164	99	163	1	1	0	0	0	0
Notes:spall on west rail column north span. - 8/21/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor hairline cracking on outside beams and spalls by abutments. Cracks and minor spalls on outside beams where they meet over the pier both sides. 8-21-19 spall on west rail column north span. - 8/21/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-113-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	22.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Local
04 City	CEDAR TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CEDAR CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	4 WEST 15 NORTH HETTINGER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 14' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 43' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	212386.5 5126940.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	3 Serious
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 0 0 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 0 0 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	09 Tons
Age and Service		Appraisal	
27 Yr Built	1925 106 Yr Reconstructed -1	67 Structural Condition	0 Closed
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	4 Tolerable
29 ADT	1 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 21, 2019
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	Y 24 09/02/2015
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	14.8 Ft.	Other Special	N
48 Length of Max Span	49 Ft.	218 Channel Profile	0 0 10/10/2013
49 Structure Length	50.85 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	15.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Brown
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-113-04.0

Structure Number: 01-113-04.0

[illegible]

Structure Number: 01-113-04.0

Remarks: 9/11/2007 - 6' of deck runner deck plank missing. Other outside runner damaged. NBI Remarks: New deck plank on deck double over driving lane. Bottom chords on both sides of bridge are bent. North outside beam also bent in. Bottom cross rods bent and some broke. Concrete deterioration on both abutments on bottom. 5' section of 1 running plank missing. Sw top chord pin nut away from chord 1/2". See pix. 05/03/2010 - Bridge closed. 09/02/2011 - 6" - 1' drop from deck to roadway. 09/02/2011 - No barricade or closed signs up. Talked with Theo and it's still supposed to be closed. Theo will go put barricades back up. 11-8-2013 BRIDGE CLOSED, ROAD HAS BEEN REALIGNED AND LOW WATER CROSSING INSTALLED WITH 3 CSP PLACED. 9-2-2015 BRIDGE STILL CLOSED. 8/7/17 - Bridge still closed. Beam (3rd in from N) missing & laying on top of bridge. Beam (3rd in from S) bowed out on W side touching adjacent beam. 8-21-19- bridge remains closed vegetation leading to bridge end, road goes to low water crossing then turns into field trail. Recommend removing bridge from inspection listing, or change status to the low water crossing if it meets criteria. - 8/21/2019

Alert Code 1: 8 rivets missing in 2 locations along north top chord. 09/02/2011 - SW bottom chord pin pushing out from bridge 1/4". One missing rivet and 3 loose in same area. - 8/21/2019

Alert Code 2: Exposed rebar on both abutments. - 8/21/2019

Fracture Critical: A fracture critical inspection was not done as this bridge has been in closed status for 9 years with nothing done to it for improvements. For previous information see archived records or view remarks below. - 8/21/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-115-05.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Major Collector
04 City	CEDAR TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00115 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	14 NORTH 2 WEST HETTINGER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	14.397	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 13' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 41' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	215862.1 5125469.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 34 61 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	August 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	42 Ft.	Other Special	N
49 Structure Length	111.88 Ft.	218 Channel Profile	1 48 07/25/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	10/16/2017
52 Deck Width	32.5 Ft.	213 Federal Aid Project Number	BRS-0115(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Brown
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-115-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,132	68	2,132	32	1,000	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	250	100	250	0	0	0	0	0	0
Notes: numerous hairline cracks on deck. - 8/21/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	1,000	0	0	100	1,000	0	0	0	0
Notes: Driving portion of the deck is showing signs of wearing with abrasion. - 8/21/2019										
104/1:Pre Clsd Box Girder	ft	449	100	449	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	69	100	69	0	0	0	0	0	0
1130/3:Cracking (RC and Other)	ft	3	100	3	0	0	0	0	0	0
Notes: hairline cracking on piers at water line - 8/21/2019										
215/1:Re Conc Abutment	ft	66	97	64	3	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes: couple of small spalls north abut below box beams - 8/21/2019										
331/1:Re Conc Bridge Railing	ft	223	100	223	0	0	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
1220/1:Deterioration (Other)	each	2	0	0	100	2	0	0	0	0
Notes: protection breaking down starting to move into stream. - 8/21/2019										
8401/1:Wings	each	4	50	2	50	2	0	0	0	0
6000/1:Scour	each	2	0	0	100	2	0	0	0	0
Notes: SW & SE corners around wings have scour starting, beginning to move around wings and into road - 8/21/2019										

Remarks: NBI Remarks: A few hairline cracks at waterline of piers. Numerous cracks on deck 11-7-2013 Couple of small spalls on North abutment below box beams. 8/21/17 - SW & SE corners around wings have scour starting, beginning to move around wings and into road. 8-21-17-updated quantities and photos. - 8/21/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-115-12.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00115 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DUCK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 7 NORTH HETTINGER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	7.299	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 07' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 41' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	215352.1 5114088.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1982 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2017	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	August 21, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	41.99 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBRS-1115(53)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Strand
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD, 10X6X44' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 01-115-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	177	57	101	43	76	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	13	0	0	100	13	0	0	0	0
1130/2:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
4000/2:Settlement	ft	43	0	0	100	43	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Cracks developing at parapet and wing ends. One half inch settlement at roof construction joints. Cracks developing in barrels 11-14-2013 Crack developing on parapets West side. 11-14-2013 Spall areas developing on South inner wall. 9-2-2015 CONSTRUCTION JOINTS ARE SEPARATED 1" TO 1 1/4". 8/21/17 - 1/2" - 1" settlement at roof construction joints. Joints are separated 1" - 1-1/2".

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-116-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Local
04 City	CEDAR TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CHANTA PETA CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	17 NORTH 2 WEST HETTINGER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 14' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 40' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	216754.4 5128145.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 37 67 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 40 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	40 Ft.	Other Special	N
49 Structure Length	84.97 Ft.	218 Channel Profile	1 48 07/25/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	10/16/2017
	28.2 Ft.	213 Federal Aid Project Number	SOS-1(1)
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Brown
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 01-116-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	379	94	355	6	24	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	24	0	0	100	24	0	0	0	0
Notes:spall on bottom of t-beam east half and also on top of beam (deck) in the north wheel path. - 8/21/2019										
210/3:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	59	98	58	2	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	59	98	58	2	1	0	0	0	0
Notes:Spall area on east abutment where T-beam sits. - 8/21/2019										
1130/1:Cracking (RC and Other)	ft	3	100	3	0	0	0	0	0	0
Notes:Some minor hairline cracking on both abutments. - 8/21/2019										
330/1:Metal Bridge Railing	ft	171	100	171	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	171	100	171	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	4	100	4	0	0	0	0	0	0
Notes:Minor hairline cracking on curb near and over drains. - 8/21/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Hairline cracks on abutments. Deck spalling along joints. 11-8-2013 Damaged T Beam has been replaced with slightly different shape curb on top. 8-21-19 - damaged T-beam rail has been fixed so updated quantities, top of t beam deck spalled along north wheel path 3'-4' spall on bottom of t beam east half. - 8/21/2019

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SEC 409

Structure Number: 01-119-22.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Major Collector
04 City	SCOTT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00119 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	FLAT CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 SOUTH HETTINGER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.299	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 59' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 36' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	221098.3 5098894.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2000 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	180 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	August 08, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRC-119(53)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Strand
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14X11X60' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 01-119-22.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	121	100	121	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor cracking on parapets

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-120-08.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Major Collector
04 City	TAYLOR BUTTE TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00119 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	13 NORTH 2 EAST HETTINGER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	15.397	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 11' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 34' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	223692.1 5121204.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 23 42 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 25 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1964 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	125 30 Year of ADT 2019	71 Waterway Adequacy	4 Tolerable
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	3 SC - Unstable
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	August 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	129.92 Ft.	218 Channel Profile	1 48 07/25/2017
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/01/2017
	28.5 Ft.	213 Federal Aid Project Number	CS-182(6)
52 Deck Width	31.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Brown
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 01-120-08.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	1,299	85	1,099	15	200	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	100	0	0	100	100	0	0	0	0
Notes:middle 4 box beams have some abrasion, tracking it with delamination status since there is no abrasion listing for defect. - 8/21/2019										
1110/1:Cracking (PSC)	ft	100	0	0	100	100	0	0	0	0
Notes:cracking present in delaminated/abrasion area on box girder tops. - 8/21/2019										
205/1:Re Conc Column	each	4	100	4	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	59	97	57	3	2	0	0	0	0
1130/1:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
Notes:minor cracking on both abutments at the top - 8/21/2019										
234/1:Re Conc Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	259	0	0	100	259	0	0	0	0
1000/1:Corrosion	ft	259	0	0	100	259	0	0	0	0
Notes:Corrosion initiating on the on the railing. - 8/21/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
3410/1:Chalk(Steel Protect Coatings)	sq.ft	999	0	0	100	999	0	0	0	0
Notes:20% paint missing - 8/21/2019										
331/1:Re Conc Bridge Railing	ft	259	100	259	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	259	100	259	0	0	0	0	0	0
Notes:hairline cracking present throughout curb. - 8/21/2019										
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes:Spall on SE wing top. - 8/21/2019										
1130/1:Cracking (RC and Other)	each	3	100	3	0	0	0	0	0	0
Notes:minor cracking at wings - 8/21/2019										

Remarks: NBI Remarks: Approx. Twenty percent of rail has paint missing. Grout between beams is missing on some beams. Minor spalling below ice nose both piers. Minor cracking on both abutments. Minor cracking at all 4 wings. 8-21-19-middle 4 box beams have some cracking and abrasion - 8/21/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-120-12.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Major Collector
04 City	TAYLOR BUTTE TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00119 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DUCK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 NORTH 2 EAST HETTINGER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	10.998	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 07' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 34' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	223390.8 5114308.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 26 48 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 29 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1963 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	300 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	August 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	1 48 07/25/2017
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/06/2017
	28.5 Ft.	213 Federal Aid Project Number	CS-182(7)
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Brown
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 01-120-12.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	400	63	250	38	150	0	0	0	0
1110/1:Cracking (PSC)	ft	150	0	0	100	150	0	0	0	0
Notes:surface of middle 3 box beams have aggregate showing and there are a few cracks mostly sw corner - 8/20/2019										
206/1:Timber Column	each	14	64	9	36	5	0	0	0	0
1150/1:Check/Shake	each	1	0	0	100	1	0	0	0	0
Notes:nw outside column has a small split and crack showing up, due to abutment pressure - 8/20/2019										
1900/1:Distortion	each	4	0	0	100	4	0	0	0	0
Notes:Columns in South abutment show some distortion. - 8/20/2019										
216/1:Timber Abutment	ft	62	50	31	50	31	0	0	0	0
1900/1:Distortion	ft	16	0	0	100	16	0	0	0	0
Notes:starting to bow into stream due to pressure. - 8/20/2019										
6000/1:Scour	ft	15	0	0	100	15	0	0	0	0
Notes:Erosion and some undermining at south abutment. - 8/20/2019										
235/1:Timber Pier Cap	ft	62	100	62	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	79	100	79	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	79	0	0	100	79	0	0	0	0
1170/1:Split/Delamination (Timber)	ft	79	0	0	100	79	0	0	0	0
Notes:Timber railing has a crack running down the center of it "typical" on both sides of rail. - 8/20/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: SLOPE PROTECTION WASHED DOWN STREAM 09/09/2011 - Erosion starting at SE wing. 8/21/17 - South abutment is starting to bow into stream due to pressure. 4 columns starting to bow as well. 8-20-19-surface of middle 3 box beams have aggregate showing and there are a few cracks mostly sw corner. nw outside column has a small split and crack showing up, due to pressure from abutment. - 8/20/2019

Alert Code 1: Erosion and some undermining at south abutment. - 8/20/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-122-09.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	34.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Local
04 City	TAYLOR BUTTE TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	12 N. 4 E. HETTINGER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 32' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	227059.8 5119629.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	4 Protection Undermined
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 0 0 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 0 0 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1991 106 Yr Reconstructed -1	67 Structural Condition	0 Closed
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	3 Intolerable - Correct
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	8 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 20, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.0 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	N
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	22.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Brown
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 01-122-09.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	174	86	150	0	0	14	24	0	0
1130/1:Cracking (RC and Other)	ft	24	0	0	0	0	100	24	0	0
Notes:Cracking on bottoms of girders. - 8/20/2019										
215/1:Re Conc Abutment	ft	43	0	0	0	0	100	43	0	0
4000/1:Settlement	ft	21	0	0	0	0	100	21	0	0
Notes:NW and SW corner of abutment settled 6" to 1' and rotated in toward stream. - 8/20/2019										
6000/1:Scour	ft	11	0	0	0	0	100	11	0	0
Notes:scouring around NE corner of structure. - 8/20/2019										
7000/1:Damage	ft	11	0	0	0	0	100	11	0	0
Notes:East beam not sitting on bearing seat - 8/20/2019										

Remarks: 9/5/2007 - NW & SW corner of abutment settled. NBI Remarks: Low water crossing. No bridge end markers or curve signs. NW corner of abut has settled 6" to 1'. East beam not setting on bearing seat. North abutment wall has vertical cracks. 09/08/2011 - Some exposed rebar on top east. 08/07/2014 - Bridge closed. 9-2-2015 BRIDGE CLOSED. 8-20-19- The bridge to the west of this structure has/is closed, this low water crossing has been in it's place since 2006. The low water crossing is not closed, it could use some signing. Could not see cracking on the bottom of the girders or the North abutment this round due to water being so high under the structure. - 8/20/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-122-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Local
04 City		37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DUCK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 NORTH 3 EAST HETTINGER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 07' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 33' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	225031.0 5113414.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 31 56 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 34 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1900 106 Yr Reconstructed	1986	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	3 30 Year of ADT	2019	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	August 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	21.0 Ft.	Underwater	N
48 Length of Max Span	27 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 07/25/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	10/16/2017
	21.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Strand
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 01-122-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	217	61	132	39	85	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	31	0	0	100	31	0	0	0	0
Notes:Tops of the beams showing signs of delamination. - 8/20/2019										
1130/1:Cracking (RC and Other)	ft	50	100	50	0	0	0	0	0	0
Notes:Bottoms of the T-beams showing some minor hairline cracking. - 8/20/2019										
7000/1:Damage	ft	54	0	0	100	54	0	0	0	0
Notes:No distortion defect so adding it under damage. There is a 1" gap between the center beams on, and 2" gap on the outside at the North. The South is gapped 1" both outside beams are 1" higher. - 8/20/2019										
215/1:Re Conc Abutment	ft	46	0	0	100	46	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	23	0	0	100	23	0	0	0	0
Notes:Both abutments have spalls at the top where the beams are sitting and also a few along the water line, they also have areas of delamination. - 8/20/2019										
1130/1:Cracking (RC and Other)	ft	23	0	0	100	23	0	0	0	0
Notes:Cracking present at both abutments. - 8/20/2019										
331/1:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
Notes:does not seem to be any slope protection no rock on surface - 8/20/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1190/1:Abrasion(PSC/RC)	each	2	0	0	100	2	0	0	0	0
Notes:nw corner at wing eroding with water going under beam to abutment. south wing showing moderate abrasion at top. - 8/20/2019										
6000/1:Scour	each	2	0	0	100	2	0	0	0	0
Notes:NE corner has erosion hole behind wing allowing water to collect behind the abutment, NW corner is also scouring. - 8/20/2019										

Remarks: NBI Remarks: Spalling on west abutment. One inch gap between center beam. Two inch gap between outside beams. 11-8-2013 NW corner at wing eroding with water going under beam to abutment. 11-8-2013 North East side on road has erosion hole allowing water to collect behind abutment 2" x2"x1' deep. 8/21/17 - both outside beams roughly 1" higher than the next - see pictures. 8-20-19- bottom of t beam has minor hairline cracking, south wing showing moderate abrasion at top, does not seem to be any slope protection, no rock on surface. - 8/20/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-123-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	82.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Local
04 City	DUCK CREEK TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DUCK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 6 NORTH HETTINGER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 05' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 31' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	228046.7 5110233.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 41 75 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 22 41 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1938 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 21, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.7 Ft.	Other Special	N
48 Length of Max Span	27 Ft.	218 Channel Profile	1 48 07/26/2017
49 Structure Length	28.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	19.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Brown
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 01-123-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	570	97	550	4	20	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	570	97	550	4	20	0	0	0	0
Notes:concrete deck has an area of moderate cracking mid span - 8/21/2019										
107/1:Steel Opn Girder/Beam	ft	289	0	0	100	289	0	0	0	0
1000/1:Corrosion	ft	289	0	0	100	289	0	0	0	0
Notes:Corrosion is beginning to initiate on the girders because the paint system was not present or has failed. - 8/21/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Failed, no paint present. - 8/21/2019										
215/3:Re Conc Abutment	ft	39	87	34	0	0	13	5	0	0
1080/3:Delamination/Spall/Patched Area	ft	3	0	0	0	0	100	3	0	0
Notes:Spall in the Southeast corner of the South abutment. - 8/21/2019										
1090/3:Exposed Rebar	ft	2	0	0	0	0	100	2	0	0
Notes:south abutment se corner exposed rebar - 8/21/2019										
1130/3:Cracking (RC and Other)	ft	3	100	3	0	0	0	0	0	0
Notes:Hairline vertical crack on the South abutment in the middle. - 8/21/2019										
330/1:Metal Bridge Railing	ft	59	0	0	0	0	100	59	0	0
1000/1:Corrosion	ft	59	0	0	0	0	100	59	0	0
Notes:Metal railing is corroding. - 8/21/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:failed, no protective system present. - 8/21/2019										
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
6000/1:Scour	each	2	0	0	100	2	0	0	0	0
Notes:erosion starting behind wings - 8/21/2019										
8401/3:Wings	each	4	50	2	25	1	25	1	0	0
1190/3:Abrasion(PSC/RC)	each	1	0	0	100	1	0	0	0	0
Notes:NE wing is showing signs of wear. - 8/21/2019										
4000/3:Settlement	each	1	0	0	0	0	100	1	0	0
Notes:SW wing settling into stream. - 8/21/2019										

Remarks: 2/6/2008 - Steel girders appear to be in good shape with exception of no paint visible. NBI Remarks: Timbers running parallel to girders being used as forms for concrete deck. See photos. Erosion starting behind wings. 12/3/14 Structure same condition. Ice under bridge prevents seeing below water line. 9-2-2015 COUNTY PLACED RIP RAP BEHIND WINGS. 8/21/17 - No change. 8.21.19 - quantities and photos updated. - 8/21/2019

Alert Code 2: 8.21.19 abutment SE corner exposed rebar with erosion and undermining at the abutment and wing, moved from alert code 1. - 8/21/2019

Alert Code 3: 11-8-2013 County reported abutments very corroded and rotten below the water line, that is why they are concerned about replacing. Bridge Division lowered Sub to 5. 8.21.19 - this is no longer visible with riprap installed by the county. - 8/21/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-125-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	31.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Local
04 City	HAYNES CITY	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	FLAT CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	SOUTH EDGE OF HAYNES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 58' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 28' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	230681.7 5096718.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	3 Serious
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 19 35 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 13 24 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	08 Tons
Age and Service		Appraisal	
27 Yr Built	1936 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	4 Tolerable
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 08, 2019
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.1 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 07/26/2017
49 Structure Length	25.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	15.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Martin
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-125-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	398	0	0	100	398	0	0	0	0
Notes:deck and some girders replaced 2009 - 8/8/2019										
1140/1:Decay/Section Loss	sq.ft	398	0	0	100	398	0	0	0	0
Notes:Deck is showing signs of starting to decay and some section loss. - 8/8/2019										
107/1:Steel Opn Girder/Beam	ft	207	0	0	0	0	100	207	0	0
1000/1:Corrosion	ft	155	0	0	0	0	100	155	0	0
Notes:100% of the girders are corroding. - 8/8/2019										
1900/1:Distortion	ft	52	0	0	0	0	100	52	0	0
Notes:Outside beams on each side are bowing. - 8/8/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Failed, no protective coating present. - 8/8/2019										
215/3:Re Conc Abutment	ft	33	0	0	0	0	0	0	100	33
1080/3:Delamination/Spall/Patched Area	ft	13	0	0	0	0	0	0	100	13
Notes:Both abutments are 100% delaminated with spalling present. - 8/8/2019										
1090/3:Exposed Rebar	ft	10	0	0	0	0	0	0	100	10
Notes:Both abutments have multiple area's of exposed rebar. - 8/8/2019										
6000/3:Scour	ft	10	0	0	0	0	0	0	100	10
Notes:Scouring exposing the footing on both abutments. - 8/8/2019										
330/1:Metal Bridge Railing	ft	52	0	0	0	0	0	0	100	52
1000/1:Corrosion	ft	13	0	0	0	0	0	0	100	13
Notes:The metal railing that is still present is corroded. - 8/8/2019										
1020/1:Connection	ft	26	0	0	0	0	0	0	100	26
Notes:The west metal railing is broken off and is laying in the stream. - 8/8/2019										
1900/1:Distortion	ft	13	0	0	0	0	0	0	100	13
Notes:East railing is bent badly and not functioning. - 8/8/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Coating system has failed. - 8/8/2019										
332/1:Timb Bridge Railing	ft	52	0	0	0	0	0	0	100	52
1020/1:Connection	ft	52	0	0	0	0	0	0	100	52
Notes:No timber bridge railing is present at all on the structure. - 8/8/2019										
8401/3:Wings	each	4	0	0	0	0	0	0	100	4
1080/3:Delamination/Spall/Patched Area	each	4	0	0	0	0	0	0	100	4
Notes:All 4 wings are showing various area's of spalling and delamination with areas of exposed rebar. - 8/8/2019										

Remarks: NBI Remarks: Stringer rusted and corroded and bent due to ice damage. Undermining under both abutments. Exposed pile section loss to pile. 3-4'undermining at south abutment. 09/07/2011 - Outside beams on each side bowing slightly. 11-19-2013 Deck and some girders replaced in 2009. 8-8-19-timber bridge railing is gone, west metal rail in the stream, east rail bent, wings severely delaminated/ cracked with exposed steel. updated quantities and photos. - 8/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-125-23.0

Alert Code 2: Abutments cracked and deteriorating, with steel exposed. - 8/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-127-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	36.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Local
04 City	CHANDLER TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CEDAR CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	10 NORTH 9 WEST HETTINGER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 09' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 26' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	234764.1 5116738.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	3 Serious
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 19 35 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 12 22 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	04 Tons
Age and Service		Appraisal	
27 Yr Built	1930 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	4 Tolerable
29 ADT	5 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	5 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 14, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 08/14/2019
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	14.4 Ft.	Other Special	N
48 Length of Max Span	88 Ft.	218 Channel Profile	1 48 07/25/2017
49 Structure Length	92.85 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	14.8 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Abdelmokarm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-127-10.0

Structure Number: 01-127-10.0

Element / Env. / Description		Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck		sq.ft	1,367	0	0	0	0	100	1,367	0	0
1080/1:Delamination/Spall/Patched Area		sq.ft	506	0	0	0	0	100	506	0	0
Notes:Entire deck is either delaminated or has heavy abrasion. - 8/14/2019											
1190/1:Abrasion(PSC/RC)		sq.ft	861	0	0	0	0	100	861	0	0
Notes:Entire deck is either delaminated or has heavy abrasion. - 8/14/2019											
113/1:Steel Stringer		ft	558	0	0	0	0	100	558	0	0
1000/1:Corrosion		ft	558	0	0	0	0	100	558	0	0
Notes:100% of the stringers are corroding. - 8/14/2019											
515/1:Steel Protective Coating		sq.ft	999	0	0	0	0	0	100	999	999
3440/1:Eff (Stl Protect Coat)		sq.ft	999	0	0	0	0	0	100	999	999
Notes:protective system failed. - 8/14/2019											
120/1:Steel Truss		ft	187	0	0	0	0	100	187	0	0
1000/1:Corrosion		ft	187	0	0	0	0	100	187	0	0
Notes:100% of the truss is showing signs of corrosion. - 8/14/2019											
515/1:Steel Protective Coating		sq.ft	999	0	0	0	0	0	100	999	999
3440/1:Eff (Stl Protect Coat)		sq.ft	999	0	0	0	0	0	100	999	999
Notes:protective coating has failed. - 8/14/2019											
152/1:Steel Floor Beam		ft	79	0	0	0	0	100	79	0	0
1000/1:Corrosion		ft	79	0	0	0	0	100	79	0	0
Notes:moderate rusting, and section loss. - 8/14/2019											
515/1:Steel Protective Coating		sq.ft	999	0	0	0	0	0	100	999	999
3440/1:Eff (Stl Protect Coat)		sq.ft	999	0	0	0	0	0	100	999	999
Notes:protective system has failed. - 8/14/2019											
215/1:Re Conc Abutment		ft	39	0	0	0	0	62	24	39	15
1080/1:Delamination/Spall/Patched Area		ft	20	0	0	0	0	100	20	0	0
Notes:Abutment has various area's of delamination and spalls. - 8/14/2019											
1090/1:Exposed Rebar		ft	2	0	0	0	0	100	2	0	0
Notes:exposed rebar from delaminated areas and spalls. - 8/14/2019											
1130/1:Cracking (RC and Other)		ft	2	0	0	0	0	100	2	0	0
Notes:Moderate cracking on abutments. - 8/14/2019											
1190/1:Abrasion(PSC/RC)		ft	8	0	0	0	0	0	100	8	8
Notes:Most of the abutments are showing signs of wear exposing aggregates that are falling out at bearing plates. - 8/14/2019											
6000/1:Scour		ft	7	0	0	0	0	0	100	7	7
Notes:Undermining at the south abutment exposing footing. - 8/14/2019											
330/1:Metal Bridge Railing		ft	187	0	0	0	0	92	172	8	15
1000/1:Corrosion		ft	172	0	0	0	0	100	172	0	0
Notes:100% of the railing is corroding with section loss. - 8/14/2019											
1900/1:Distortion		ft	15	0	0	0	0	0	100	15	15
Notes:Broken/bent railings on both sides of the structure at the beginning of the runs. - 8/14/2019											

Structure Number: 01-127-10.0

515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:protective system failed. - 8/14/2019										
331/1:Re Conc Bridge Railing	ft	187	0	0	0	0	43	80	57	107
1090/1:Exposed Rebar	ft	80	0	0	0	0	100	80	0	0
Notes:rebar present along entire run of concrete curbing from the wearing of concrete - 8/14/2019										
1190/1:Abrasion(PSC/RC)	ft	107	0	0	0	0	0	0	100	107
Notes:Entire concrete curb is deteriorated and worn. - 8/14/2019										
8401/1:Wings	each	4	0	0	0	0	0	0	100	4
1080/1:Delamination/Spall/Patched Area	each	1	0	0	0	0	0	0	100	1
Notes:NE wing spall with the top of the wing almost working itself to be broken off. - 8/14/2019										
1130/1:Cracking (RC and Other)	each	2	0	0	0	0	0	0	100	2
Notes:NW and SE wings cracking and deteriorated with exposed rebar. - 8/14/2019										
6000/1:Scour	each	1	0	0	0	0	0	0	100	1
Notes:NE wing has major erosion behind it, advancing into the roadway. - 8/14/2019										

Remarks: NBI Remarks: Roadway alignment, curves on each side of structure. FCM inspection, no FCM problems found. 09/07/2011 - NW,SE and SW wing minor erosion. 8/21/17 - FCM inspection, nothing found. 8-14-19- moved deck to state 3 for major delamination and spalling. fcm insp, remains the same inspected upper & lower truss members @ arms length , nothing found - 8/14/2019

Alert Code 1: C-iron bent on west and east sides. Stringers, floor beams and truss members have moderate rusting and some section loss.Undermining at south abutment. Spalling and delamination on deck.NE wing has major erosion behind it. Advancing into roadway.Abutment has a few cracks and some minor deterioration of concrete on bottom of abutment. - 8/14/2019

Alert Code 2: Curb has severe concrete deterioration and exposed rebar. Delamination of concrete abutment with exposed rebar causing undermining of bearing plates on all 4 corners. - 8/14/2019

Fracture Critical: 8.14.19 - inspected upper and lower truss members and noticed no change. - 8/14/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-132-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00114 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 NORTH 14 EAST HETTINGER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	6.898	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 06' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 19' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	242459.4 5111028.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 29 53 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 17 32 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	August 14, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	58 Ft.	Other Special	N
49 Structure Length	149.93 Ft.	218 Channel Profile	1 48 07/26/2017
50 Curb/Sidewalk Widths	1.6 Ft Rt-Side	Chaining Date	None
	1.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	10/31/2017
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	CRS-0114(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Martin, Abdelmokarm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-132-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,198	100	4,198	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	50	100	50	0	0	0	0	0	0
Notes:minor transverse cracking on deck - 8/14/2019										
104/1:Pre Clsd Box Girder	ft	600	100	600	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	59	83	49	17	10	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
Notes:minor concrete deterioration below ice nose pier 3 - 8/14/2019										
1130/1:Cracking (RC and Other)	ft	5	100	5	0	0	0	0	0	0
Notes:hairline cracking at waterline - 8/14/2019										
215/1:Re Conc Abutment	ft	59	98	58	2	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Spall on East abutment North end. - 8/14/2019										
1130/1:Cracking (RC and Other)	ft	2	100	2	0	0	0	0	0	0
Notes:Minor cracking on West abutment south side. - 8/14/2019										
331/1:Re Conc Bridge Railing	ft	299	99	295	1	4	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:spall with exposed rebar bridge rail n-side midway - 8/14/2019										
1090/1:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
Notes:in spalled area on North side raid midway. - 8/14/2019										
1130/1:Cracking (RC and Other)	ft	20	100	20	0	0	0	0	0	0
Notes:Minor cracking on curb. - 8/14/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	50	2	50	2	0	0	0	0
1130/1:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:se wing minor cracking - 8/14/2019										
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:erosion behind ne wing. - 8/14/2019										

Remarks: NBI Remarks: Minor concrete deterioration below ice nose pier three. 09/07/2011 - Minor transverse cracking on deck. Minor cracking on curb. 11-18-2013 SE wing has minor cracking. 8-14-19- erosion behind ne wing, - 8/14/2019

Alert Code 2: exposed rebar bridge rail n-side midway - 8/14/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-132-20.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Major Collector
04 City	GILSTRAP TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00122 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DUCK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	13 EAST OF HETTINGER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	6.299	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 00' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 20' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	240906.4 5099815.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 31 56 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	39 Ft.	Other Special	N
49 Structure Length	102.03 Ft.	218 Channel Profile	1 48 07/26/2017
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	02/28/1996
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	CRS-0122(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-132-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,842	100	2,842	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	10	100	10	0	0	0	0	0	0
Notes:minor cracking on deck - 8/8/2019										
104/1:Pre Clsd Box Girder	ft	407	100	407	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	66	100	66	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	193	100	193	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	10	100	10	0	0	0	0	0	0
Notes:minor cracking on north outside bridge rail - 8/8/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 09/06/2011 - Minor cracking on deck. 9-3-2015 MINOR CRACKING ON NORTH OUTSIDE BRIDGE RAILING. - 8/8/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-135-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	16 EAST 5 NORTH HETTINGER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 04' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 16' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	246425.1 5107048.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1998 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	3 Intolerable - Correct
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	22.97 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DPI-0036(005)011
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 11X6X28' PRECAST RCB WITH HEAD		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 01-135-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
300/2:Strip Seal Exp Joint	ft	56	93	52	7	4	0	0	0	0
7000/2:Damage	ft	4	0	0	100	4	0	0	0	0
Notes:Joint seal on either wide has damage from traffic impact. - 8/13/2019										
841/3:Re Conc Culvert Precast	ft	56	66	37	34	19	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	14	0	0	100	14	0	0	0	0
Notes:NW, SW, and NE corners are spalled into the deck. - 8/13/2019										
1090/3:Exposed Rebar	ft	5	0	0	100	5	0	0	0	0
Notes:Exposed rebar in every spalled corner that is present. - 8/13/2019										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8399/2:Slope Protection, RC	each	2	0	0	100	2	0	0	0	0
1090/2:Exposed Rebar	each	1	0	0	100	1	0	0	0	0
Notes:ne concrete slope protection spalled w rebar - 8/13/2019										
1130/2:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:ne concrete slope protection spalled w rebar , sw spalled - 8/13/2019										
8402/3:Headwalls	each	2	50	1	50	1	0	0	0	0
1130/3:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:Minor spalls on headwalls, no spall defect so listing under cracking. - 8/13/2019										

Remarks: 2/5/2008 - Cracking at NE and SW corners into deck. NBI Remarks: Cracks developing on all corners of box. 11-15-2013 Both ends of box on top are beginning to spall out. 8-13-19- seal on either end is deteriorating from traffic impact see photos. - 8/13/2019

Alert Code 1: 9-3-2015 ALL 4 CORNERS OF BOX ON TOP OF ROADWAY ARE NOW BROKE OUT. - 8/13/2019

Alert Code 2: 8/21/17 - NW, SW, and SE corners are spalled into deck with exposed rebar. NE concrete slope protection is also spalled out with exposed rebar, SW slope protection is spalled. - 8/13/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-135-21.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Major Collector
04 City	GILSTRAP TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00122 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	17 EAST OF HETTINGER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	10.198	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 00' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 16' 07.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	246918.1 5099419.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 49 89 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 29 54 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	August 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	86.94 Ft.	218 Channel Profile	1 48 07/26/2017
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	10/31/2017
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	ER-0122(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 01-135-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	696	100	696	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	30	67	20	33	10	0	0	0	0
1120/1:Efflorescence/Rust Staining	ft	10	0	0	100	10	0	0	0	0
Notes:minor staining from road gravel draining down onto element. - 8/8/2019										
1130/1:Cracking (RC and Other)	ft	4	100	4	0	0	0	0	0	0
Notes:hairline cracking on pier in middle. - 8/8/2019										
215/1:Re Conc Abutment	ft	59	56	33	44	26	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	6	0	0	100	6	0	0	0	0
Notes:spalling on south abutment 5' in from east and west. - 8/8/2019										
1120/1:Efflorescence/Rust Staining	ft	20	0	0	100	20	0	0	0	0
Notes:Staining on abutments from leakage coming from road gravel on top. - 8/8/2019										
1130/1:Cracking (RC and Other)	ft	3	100	3	0	0	0	0	0	0
Notes:Minor hairline cracking on abutments - 8/8/2019										
331/1:Re Conc Bridge Railing	ft	144	100	144	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	30	100	30	0	0	0	0	0	0
Notes:Rail posts have hairline cracking intermittently throughout the structure. - 8/8/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	each	4	100	4	0	0	0	0	0	0
Notes:All 4 wings have hairline cracking beginning. - 8/8/2019										

Remarks: NBI Remarks: Minor cracking on abutments and wings. South abutment has minor spalling. 09/06/2011 - Some popouts on curb. Minor cracking on some curb posts. 09/06/2011 - Staining and minor cracks on pier. - 8/8/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-137-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	71.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	19 EAST 3 NORTH HETTINGER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 03' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 13' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	250346.0 5104710.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 20 37 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 12 22 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	08 Tons
27 Yr Built	2009 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	4 Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	3 30 Year of ADT 2019	71 Waterway Adequacy	4 Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	August 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.7 Ft.	Underwater	N
48 Length of Max Span	55 Ft.	Other Special	N
49 Structure Length	56.10 Ft.	218 Channel Profile	0 0 10/16/2013
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	18.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	20.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-137-17.0

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 01-137-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,114	75	836	25	278	0	0	0	0
1150/1:Check/Shake	sq.ft	278	0	0	100	278	0	0	0	0
Notes:deck runner boards are showing signs of wear with checks and shakes along entire length - 8/13/2019										
107/1:Steel Opn Girder/Beam	ft	221	0	0	0	0	100	221	0	0
1000/1:Corrosion	ft	221	0	0	0	0	100	221	0	0
Notes:All girders are corroding - 8/13/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:protective system failed, metal is corroding. - 8/13/2019										
202/3:Steel Column	each	4	0	0	0	0	100	4	0	0
1000/3:Corrosion	each	4	0	0	0	0	100	4	0	0
Notes:All columns corroding. - 8/13/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/3:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:protective system failed underlying metal is corroding. - 8/13/2019										
216/2:Timber Abutment	ft	42	0	0	100	42	0	0	0	0
1140/2:Decay/Section Loss	ft	42	0	0	100	42	0	0	0	0
Notes:Timber abutment starting to show signs of decay. - 8/13/2019										
231/1:Steel Pier Cap	ft	21	0	0	100	21	0	0	0	0
1000/1:Corrosion	ft	21	0	0	100	21	0	0	0	0
Notes:corrosion initiating on element. - 8/13/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:failed - 8/13/2019										
235/1:Timber Pier Cap	ft	21	0	0	100	21	0	0	0	0
1140/1:Decay/Section Loss	ft	21	0	0	100	21	0	0	0	0
Notes:Showing starting signs of decay/section loss. - 8/13/2019										
332/1:Timb Bridge Railing	ft	112	45	50	29	32	0	0	27	30
1020/1:Connection	ft	30	0	0	0	0	0	0	100	30
Notes:Portion of the rail on the SE and NW are missing. - 8/13/2019										
1140/1:Decay/Section Loss	ft	32	0	0	100	32	0	0	0	0
Notes:Rail is showing signs of decay/section loss beginning. - 8/13/2019										
8398/2:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/2:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Rip rap seems to be settling into stream. - 8/13/2019										
8401/3:Wings	each	4	0	0	0	0	0	0	100	4
Notes:cannot see the wings are they are covered by rip rap and concrete slope protection or there are none present on this structure. - 8/13/2019										
6000/3:Scour	each	4	0	0	0	0	0	0	100	4

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-137-17.0

Notes: cannot see the wings are they are covered by rip rap and concrete slope protection or there are none present on this structure. - 8/13/2019

Remarks: New structure built 2009. Paint failing on beams. 09/07/2011 - Erosion problems taken care of riprap placed and slopes fixed up. 11-18-2013 County inspects welds every winter because they built the structure. 11-18-2013 Original structure in place to West has been closed. 8/8/17 - Deck runner boards are showing signs of wear with checks/cracks along entire length. 8-13-19- timber curb and rail has a section missing se / nw , also showings of decay - 8/13/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-139-16.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00139 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 NORTH OF LEMMON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.498	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 04' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 11' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	253647.7 5106422.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 48 87 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 29 53 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1975 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	140 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	3 SC - Unstable
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	August 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	147.97 Ft.	218 Channel Profile	1 48 07/26/2017
50 Curb/Sidewalk Widths	1.6 Ft Rt-Side	Chaining Date	None
	1.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	10/31/2017
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	BRS-606(10)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-139-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,144	100	4,144	0	0	0	0	0	0
Notes:minor pop outs on deck - 8/13/2019										
104/1:Pre Clsd Box Girder	ft	591	100	591	0	0	0	0	0	0
205/2:Re Conc Column	each	4	100	4	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
234/1:Re Conc Pier Cap	ft	59	100	59	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	295	99	293	1	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:west rail has 2 spalled areas sw corner. - 8/13/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor pop outs on deck. 8-13-19 nw ditch has erosion w/ riprap in it 10'x30'x5'. ne bank is slumping/ eroding see pict, west rail has 2 spalled areas sw corner. - 8/13/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-143-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Local
04 City	BEISIGI TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TIMBER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	17 NORTH 2 EAST OF LEMMON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 11' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 07' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	258996.8 5119967.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	15 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	August 08, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.7 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	37.07 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBP-1(1)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Strand
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 12X8X30' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-143-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	89	97	86	3	3	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Cracking where parapet meets wall. 09/07/2011 - Small spall on NW wingwall. 9-3-2015
 PARAPET ON NORTH HAS SPALLING ABOVE THE ICE NOSE OF THE WEST END OF BOX. 8/8/17 - Small
 crack on SW ice nose. Small spall on SE end where parapet meets wingwall.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-143-17.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Major Collector
04 City	SOUTH FORK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00143 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 8 NORTH OF LEMMON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.900	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 03' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 06' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	259999.1 5104651.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 39 71 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2006 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	August 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.5 Ft.	Underwater	N
48 Length of Max Span	72 Ft.	Other Special	N
49 Structure Length	186.02 Ft.	218 Channel Profile	1 48 07/26/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/27/2006
	28.5 Ft.	213 Federal Aid Project Number	BRC-0143(054)
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Martin
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-143-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4	50	2	50	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	1	0	0	100	1	0	0	0	0
Notes:Guardrail / bridge rail has a 6' section damaged on bridge on east side. This area spalled out in two areas under posts on deck exposing rebar. Spall areas are 3' X 2" 4" and 1' X 1' X 3". - 8/13/2019										
1090/1:Exposed Rebar	sq.ft	1	0	0	100	1	0	0	0	0
Notes:exposed rebar in spalled out area from guardrail getting damaged. - 8/13/2019										
104/1:Pre Clsd Box Girder	ft	724	100	724	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	56	100	56	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	61	100	61	0	0	0	0	0	0
313/1:Fixed Bearing	each	24	100	24	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	372	98	366	2	6	0	0	0	0
7000/1:Damage	ft	6	0	0	100	6	0	0	0	0
Notes:bridge rail has a 6' section damaged on east side . this area spalled out in two areas under posts on deck exposing rebar spall areas are 3'x2'4" and 1'x1'x3" - 8/13/2019										
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:erosion behind nw wing - 8/13/2019										

Remarks: 11-18-2013 Debris against ice nose Pier 2 from North. Erosion behind NW & NE wing. 8-13-19- quantities updated and new pictures taken. - 8/13/2019

Alert Code 2: 8.13.19 - Guardrail / bridge rail has a 6' section damaged on bridge on east side. This area spalled out in two areas under posts on deck exposing rebar. Spall areas are 3' X 2" 4" and 1' X 1' X 3". - 8/13/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-146-11.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Major Collector
04 City	BEISIGI TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00143 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEEP CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	14 NORTH 4 EAST LEMMON SD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	17.196	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 08' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 03' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	263746.5 5114935.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 23 43 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	47 Ft.	Other Special	N
49 Structure Length	125.98 Ft.	218 Channel Profile	1 48 07/26/2017
50 Curb/Sidewalk Widths	1.6 Ft Rt-Side	Chaining Date	None
	1.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	12/10/1996
52 Deck Width	32.5 Ft.	213 Federal Aid Project Number	CBRS-143(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 01-146-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,541	75	2,656	25	885	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	885	0	0	100	885	0	0	0	0
Notes:deck showing abrasion in middle where traffic runs - 8/13/2019										
104/1:Pre Clsd Box Girder	ft	505	100	505	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	66	91	60	9	6	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	6	0	0	100	6	0	0	0	0
Notes:north pier wall , west side showing delamination - 8/13/2019										
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	253	95	239	6	14	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	9	0	0	100	9	0	0	0	0
Notes:spalling around 14 rail post on either side of the structure. - 8/13/2019										
1090/1:Exposed Rebar	ft	5	0	0	100	5	0	0	0	0
Notes:exposed rebar present in spalled area's on posts. - 8/13/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Some concrete deterioration at water line pier two west side. 09/07/2011 - Minor cracking on deck. 8-13-19- deck showing abrasion in middle where traffic runs. north pier wall , west side showing delamination. - 8/13/2019

Alert Code 2: 8/8/17 - Spalling around 14 rail posts, some with exposed rebar. - 8/13/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-148-13.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	79.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Adams	26 Functional	Rural, Local
04 City	SOUTH FORK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TIMBER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 11 NORTH LEMMON SD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 06' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 00' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	267856.1 5109990.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 49 88 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 29 53 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1938 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	5 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	9 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 13, 2019
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.7 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 07/26/2017
49 Structure Length	40.03 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	04/21/2016
51 Bridge Rdwy Width - Curb to Curb	18.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Martin
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 01-148-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	721	14	100	49	354	37	267	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	621	0	0	57	354	43	267	0	0
Notes:Almost all of the top side of the deck has abrasion to some extent. see photos - 8/13/2019										
107/1:Steel Opn Girder/Beam	ft	322	0	0	88	284	0	0	12	38
1000/1:Corrosion	ft	246	0	0	100	246	0	0	0	0
Notes:Entire element is showing signs of corrosion. - 8/13/2019										
1020/1:Connection	ft	38	0	0	0	0	0	0	100	38
Notes:North girder was removed at some time to replace the wingwalls and was never reinserted, therefore no beam under the north curb of bridge. - 8/13/2019										
1900/1:Distortion	ft	38	0	0	100	38	0	0	0	0
Notes:farthest north beam that is present is twisted and bent. - 8/13/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:failed, no protection of underlying metal. - 8/13/2019										
215/1:Re Conc Abutment	ft	39	0	0	0	0	80	31	21	8
1080/1:Delamination/Spall/Patched Area	ft	8	0	0	0	0	100	8	0	0
Notes:Delamination along bottom of abutments that expose rebar, and spalls at the top where the girders sit in the corners. - 8/13/2019										
1090/1:Exposed Rebar	ft	8	0	0	0	0	0	0	100	8
Notes:Exposed rebar in the delaminated portion near the water line of both abutments. - 8/13/2019										
1190/1:Abrasion(PSC/RC)	ft	23	0	0	0	0	100	23	0	0
Notes:Both abutments are showing signs of advanced abrasion / wearing with concrete crumbling. - 8/13/2019										
331/1:Re Conc Bridge Railing	ft	79	0	0	0	0	100	79	0	0
1090/1:Exposed Rebar	ft	20	0	0	0	0	100	20	0	0
Notes:exposed and debonded rebar in the deteriorating curb. - 8/13/2019										
1190/1:Abrasion(PSC/RC)	ft	59	0	0	0	0	100	59	0	0
Notes:entire curb is deteriorating and breaking down exposing rebar. - 8/13/2019										
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/1:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Slope protection is washing into and away in stream. - 8/13/2019										
8401/1:Wings	each	4	0	0	25	1	25	1	50	2
1130/1:Cracking (RC and Other)	each	2	0	0	50	1	50	1	0	0
Notes:All 4 wings have cracking to some extent, NE, SW, and SE seem to have worse cracking then NW. - 8/13/2019										
4000/1:Settlement	each	2	0	0	0	0	0	0	100	2
Notes:NE and NW wings appear to be settling into stream. - 8/13/2019										

Remarks: NBI Remarks: Spalls under beams both corners west abutment. Angle iron tying beams are bent on north side of bridge, broken off north beam. 11-15-2013 All wings have major cracking. 11-15-2013 Northern most stringer removed at some time to allow replacement of top of wings. See picture. 11-15-2013 No beam under North curb of bridge. 8-13-19-no note changes, quantities have been adjusted & updated - 8/13/2019

Alert Code 1: West abutment some concrete deterioration.11-15-2013 Farthest North remaining beam is twisted and bent. - 8/13/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 01-148-13.0

Alert Code 2: East abutment concrete deterioration and exposed rebar. Curb has deteriorating concrete and exposed rebar. 11-15-2013 NE wing is falling apart. See picture. 11-15-2013 Deck has spalling, delamination, and is crumbling. - 8/13/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 02-120-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Barnes	26 Functional	Rural, Local
04 City	NELSON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 2 WEST KATHRYN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 44' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 02' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	573381.6 5177317.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 18, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Belanger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X9X80' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 02-120-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	161	76	122	11	18	13	21	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor cracking in barrels. Minor cracking and exposed rebar west parapet. Seepage through cracks on north wall. Channel restricted with dirt and vegetation,

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 02-132-40.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	39.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Barnes	26 Functional	Rural, Local
04 City	RARITAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTHEAST OF NOME	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 40' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 47' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	592802.1 5169161.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 10 19 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 8 15 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	12 Tons
Age and Service		Appraisal	
27 Yr Built	1920 106 Yr Reconstructed	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	10 30 Year of ADT 2018	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 18, 2018
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	18.0 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 05/23/2017
49 Structure Length	25.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.3 Ft Lt-Side	212 Structure Load Rated	04/21/2016
51 Bridge Rdwy Width - Curb to Curb	18.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 02-132-40.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	484	0	0	100	484	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	100	0	0	100	100	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	259	0	0	100	259	0	0	0	0
1000/2:Corrosion	ft	259	0	0	100	259	0	0	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
215/3:Re Conc Abutment	ft	39	0	0	100	39	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	30	0	0	100	30	0	0	0	0
Notes:_										
1090/3:Exposed Rebar	ft	9	0	0	100	9	0	0	0	0
Notes:_										
330/2:Metal Bridge Railing	ft	52	100	52	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	52	15	8	27	14	27	14	31	16
1080/3:Delamination/Spall/Patched Area	ft	16	0	0	0	0	0	0	100	16
Notes:_										
1090/3:Exposed Rebar	ft	14	0	0	100	14	0	0	0	0
Notes:_										
8398/3:Slope Protection	each	2	0	0	0	0	0	0	100	2
8401/3:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: Substandard curbs with exposed steel. North abutment has moderate to heavy scaling at waterline, steel exposed. South abutment has some moderate scaling. South 4 ton weight limit sign is missing. Posted for load 9-19-18

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 02-135-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Barnes	26 Functional	Rural, Local
04 City	ORISKA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	KOLDOK WATERWAY	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST OF ORISKA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 44' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	596126.7 5198650.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 39 71 Tons
208 Dk Overburden	201 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	May 22, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	24 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	1 48 05/30/2017
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	11/08/2017
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	BRO-2(8)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Wegner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 02-135-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	207	98	202	2	5	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
Notes: _										
202/3:Steel Column	each	10	80	8	20	2	0	0	0	0
1900/3:Distortion	each	2	0	0	100	2	0	0	0	0
Notes: _										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3420/3:Peel/Bub/Crack(Stl Protect Co)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
219/3:Stl Abutment	ft	59	0	0	0	0	100	59	0	0
Notes: _										
1000/3:Corrosion	ft	59	0	0	0	0	100	59	0	0
Notes: _										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
3430/3:Ox Flm/Txt Adhr(Stl Prot Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
231/1:Steel Pier Cap	ft	59	100	59	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	52	100	52	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	52	71	37	29	15	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes: _										
1130/2:Cracking (RC and Other)	ft	13	0	0	100	13	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Curb on sw corner spalled 2' long. Minor damage to the nw piling. Rusting on abutments. Small spalls on south beam.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 02-135-41.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Barnes	26 Functional	Rural, Local
04 City	RARITAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 2 SOUTH OF NOME	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 39' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 43' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	597637.4 5167540.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	10 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	July 29, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.67 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	Ft Rt-Side	Chaining Date	None
	Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	0.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
Double 14'x7'x50' RCBC		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 02-135-41.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: _

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 02-137-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Barnes	26 Functional	Rural, Local
04 City	ORISKA TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH OF TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 40' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	600303.5 5198735.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1965 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2014	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	May 23, 2016
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Belanger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 8X4X32' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 02-137-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	95	71	67	29	28	0	0	0	0
1130/3:Cracking (RC and Other)	ft	28	0	0	100	28	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Alert Code 1: Minor cracks on barrels.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: VC01

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	65.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Barnes	26 Functional	Urban, Minor Arterial
04 City	VALLEY CITY CITY	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	09053 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4TH ST SW-EAST SIDE PARK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.330	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 00' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	575653.9 5196814.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Arch - Deck		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	0 Field eval and docs
108 Wearing Surface	6 Bituminous	64 Oper. Rating	HS 19 35 Tons
Membrane	0 None	65 Inventory Rating Method	0 Field eval and docs
Dk Protect	None	66 Inv. Rating	HS 13 25 Tons
208 Dk Overburden	303 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1924	Appraisal	
106 Yr Reconstructed	1981	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	2 Intolerable - Replace
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	3,200	72 App. Rdwy. Alignment	4 Minimum Tolerable
30 Year of ADT	2018	36 Traffic Safety Features	0 0 0 0
109 Average Daily Truck Traffic	2.00	113 Scour Critical	5 Stable w/in footing
19 Bypass, Detour Length	1 Miles		
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	January 04, 2018
32 Approach Roadway Width	39 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	64 Ft.	218 Channel Profile	Y 48 04/14/2014
49 Structure Length	139.11 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	6.6 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	5.9 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	ER-2-990(05)001
52 Deck Width	39.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
N Feature not hwy or RR		38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
N Feature not hwy or RR		40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: VC01

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/4:Re Concrete Deck	sq.ft	3,337	99	3,318	0	15	0	4	0	0
1080/4:Delamination/Spall/Patched Area	sq.ft	15	0	0	100	15	0	0	0	0
Notes: _										
1090/4:Exposed Rebar	sq.ft	4	0	0	0	0	100	4	0	0
Notes: _										
510/4:Wearing Surfaces	sq.ft	3,337	70	2,336	30	1,001	0	0	0	0
144/4:Re Conc Arch	ft	259	95	246	0	1	5	12	0	0
1080/4:Delamination/Spall/Patched Area	ft	8	0	0	0	0	100	8	0	0
Notes: _										
1090/4:Exposed Rebar	ft	5	0	0	20	1	80	4	0	0
Notes: _										
155/2:Re Conc Floor Beam	ft	407	97	396	3	11	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes: _										
1090/2:Exposed Rebar	ft	10	0	0	100	10	0	0	0	0
Notes: _										
210/3:Re Conc Pier Wall	ft	59	100	59	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	89	34	30	63	56	3	3	0	0
1130/3:Cracking (RC and Other)	ft	59	0	0	95	56	5	3	0	0
Notes: _										
331/4:Re Conc Bridge Railing	ft	279	88	246	12	32	0	1	0	0
1080/4:Delamination/Spall/Patched Area	ft	14	0	0	100	14	0	0	0	0
Notes: _										
1090/4:Exposed Rebar	ft	9	0	0	100	9	0	0	0	0
Notes: _										
1130/4:Cracking (RC and Other)	ft	10	0	0	90	9	10	1	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: No guardrail or end markers. 3" asphalt overlay has some cracking. Ends of three archs have spalls at waterline. East floor beam has 2 spalls with exposed rebar. West floor beam has 2 spalls. South arch has honeycomb concrete with expose steel. Debris in channel and in suspended utility lines. Settlement in roadway both ends. Floor beams mid span supporting south sidewalk cracked with exposed steel.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: VC02

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Barnes	26 Functional	Urban, Minor Arterial
04 City	VALLEY CITY CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	09053 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4TH ST SW-WEST SIDE PARK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.200	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 00' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	575383.3 5196811.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	—	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2007 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	2,225 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	2.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	39 Ft.	90 Date of Last Inspection	January 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	25.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	Y 60 07/17/2018
48 Length of Max Span	72 Ft.	Other Special	N
49 Structure Length	155.84 Ft.	218 Channel Profile	Y 48 04/23/2015
50 Curb/Sidewalk Widths	5.9 Ft Rt-Side	Chaining Date	None
	5.9 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	40.0 Ft.	213 Federal Aid Project Number	AC-BRU-SC-2-990(011)015
52 Deck Width	54.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: VC02

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	8,475	62	5,288	33	2,763	5	424	0	0
1130/1:Cracking (RC and Other)	sq.ft	3,187	0	0	87	2,763	13	424	0	0
Notes:_										
520/1:Conc Re Prot Sys	sq.ft	8,475	97	8,255	3	220	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	220	0	0	100	220	0	0	0	0
Notes:_										
109/1:Pre Opn Conc Girder/Beam	ft	924	100	924	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	110	100	110	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	112	96	108	4	4	0	0	0	0
1130/1:Cracking (RC and Other)	ft	7	43	3	57	4	0	0	0	0
Notes:_										
303/1:Assem Jnt With Seal	ft	112	96	107	0	0	0	0	5	5
Notes:_										
2310/1:Leakage	ft	5	0	0	0	0	0	0	100	5
Notes:_										
321/1:Re Conc Approach Slab	sq.ft	1,200	80	960	20	240	0	0	0	0
Notes:_										
1130/1:Cracking (RC and Other)	sq.ft	240	0	0	100	240	0	0	0	0
Notes:_										
331/1:Re Conc Bridge Railing	ft	312	75	235	25	77	0	0	0	0
1130/1:Cracking (RC and Other)	ft	124	38	47	62	77	0	0	0	0
Notes:_										
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: East joint seal is failing.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: VC03

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Barnes	26 Functional	Urban, Minor Arterial
04 City	VALLEY CITY CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	09022 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	8TH AVE. SOUTHWEST	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.400	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 00' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	575173.8 5196233.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 47 85 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 22 40 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5,600 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	2.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	44 Ft.	90 Date of Last Inspection	January 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	44.0 Ft.	Underwater	N
48 Length of Max Span	53 Ft.	Other Special	N
49 Structure Length	140.09 Ft.	218 Channel Profile	Y 48 04/15/2014
50 Curb/Sidewalk Widths	8.9 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	44.0 Ft.	213 Federal Aid Project Number	BRM-2-990(007)011
52 Deck Width	55.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: VC03

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/4:Re Concrete Deck	sq.ft	6,157	12	746	88	5,411	0	0	0	0
1120/4:Efflorescence/Rust Staining	sq.ft	84	0	0	100	84	0	0	0	0
Notes: _										
1130/4:Cracking (RC and Other)	sq.ft	84	0	0	100	84	0	0	0	0
Notes: _										
104/4:Pre Clsd Box Girder	ft	981	100	981	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	112	99	111	1	1	0	0	0	0
1130/3:Cracking (RC and Other)	ft	1	0	0	100	1	0	0	0	0
Notes: _										
215/4:Re Conc Abutment	ft	118	98	116	2	2	0	0	0	0
1110/4:Cracking (PSC)	ft	2	0	0	100	2	0	0	0	0
Notes: _										
321/4:Re Conc Approach Slab	sq.ft	100	98	98	2	2	0	0	0	0
331/4:Re Conc Bridge Railing	ft	279	95	264	5	15	0	0	0	0
1130/4:Cracking (RC and Other)	ft	47	68	32	32	15	0	0	0	0
Notes: _										
8398/4:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/4:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor transverse cracks & popouts on deck. Diagonal cracks north bound lane, north end of deck. Safety transition has settled NE 1 1/2", NW 1/2", and SE 1/2".

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: VC04

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	73.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Barnes	26 Functional	Urban, Collector
04 City	VALLEY CITY CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	09061 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	VIKING DRIVE SOUTHWEST	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.150	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 00' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	575384.4 5196457.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 29 53 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden 1	None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1969 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	1,600 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	3.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	40 Ft.	90 Date of Last Inspection	January 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	60.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	130.91 Ft.	218 Channel Profile	Y 48 04/22/2015
50 Curb/Sidewalk Widths	3.9 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	33.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: VC04

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/4:Pre Clsd Box Girder	ft	1,440	88	1,266	12	174	0	0	0	0
1080/4:Delamination/Spall/Patched Area	ft	14	0	0	100	14	0	0	0	0
Notes: _										
1130/4:Cracking (RC and Other)	ft	160	0	0	100	160	0	0	0	0
Notes: _										
210/3:Re Conc Pier Wall	ft	82	92	75	9	7	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	7	0	0	100	7	0	0	0	0
Notes: _										
215/3:Re Conc Abutment	ft	85	94	80	6	5	0	0	0	0
1130/3:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
Notes: _										
330/4:Metal Bridge Railing	ft	262	96	252	4	10	0	0	0	0
1900/4:Distortion	ft	10	0	0	100	10	0	0	0	0
Notes: _										
515/4:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/4:Re Conc Bridge Railing	ft	262	95	250	3	9	0	1	1	2
1080/4:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes: _										
1090/4:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes: _										
1130/4:Cracking (RC and Other)	ft	11	36	4	36	4	9	1	18	2
Notes: _										
8398/3:Slope Protection	each	2	0	0	50	1	0	0	50	1
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Bridge lacks endmarkers & standard railing. Rdwy settlement both ends.**Alert Code 1:** Some popouts on decks.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: VC05

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Barnes	26 Functional	Urban, Collector
04 City	VALLEY CITY CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	09056 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3RD AVE SE-VALLEY CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.450	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 59' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	576149.9 5196775.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 13 24 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	1,700 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	3.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	40 Ft.	90 Date of Last Inspection	November 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.8 Ft.	Underwater	N
48 Length of Max Span	56 Ft.	Other Special	N
49 Structure Length	140.09 Ft.	218 Channel Profile	Y 48 04/23/2015
50 Curb/Sidewalk Widths	7.5 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	32.2 Ft.	213 Federal Aid Project Number	BRM-2-990(008)014
52 Deck Width	42.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Carlson, Rowell
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: VC05

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/4:Re Concrete Deck	sq.ft	4,478	0	0	100	4,478	0	0	0	0
1190/4:Abrasion(PSC/RC)	sq.ft	4,478	0	0	100	4,478	0	0	0	0
104/4:Pre Clsd Box Girder	ft	698	100	698	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	75	100	75	0	0	0	0	0	0
1130/3:Cracking (RC and Other)	ft	1	100	1	0	0	0	0	0	0
215/4:Re Conc Abutment	ft	82	100	82	0	0	0	0	0	0
331/4:Re Conc Bridge Railing	ft	279	93	258	8	21	0	0	0	0
Notes:East rail: 7' of CS2 cracks, 3' of CS2 spalls (minor) West rail: 8' of CS2 cracks, 2' of CS2 spalls (minor) - 11/21/2019										
1080/4:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
1090/4:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
1130/4:Cracking (RC and Other)	ft	35	57	20	43	15	0	0	0	0
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
Notes:South slope protection CS2. - 11/21/2019										
8401/4:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Safety transition shapes have settled at NE, SE, and SW corners. 11/2019 - Debris in Channel at pier #2. - 11/21/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: VC06

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Barnes	26 Functional	Urban, Collector
04 City	VALLEY CITY CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	09025 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6TH STREET NE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.800	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 59' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	576731.0 5197744.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 36 66 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 22 40 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1982 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	1,925 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	3.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	31 Ft.	90 Date of Last Inspection	December 07, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	36.1 Ft.	Underwater	N
48 Length of Max Span	97 Ft.	Other Special	N
49 Structure Length	254.92 Ft.	218 Channel Profile	Y 48 04/14/2014
50 Curb/Sidewalk Widths	2.3 Ft Rt-Side	Chaining Date	05/27/2015
	6.2 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/27/2017
	36.4 Ft.	213 Federal Aid Project Number	BRM-2-990(06)007
52 Deck Width	46.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: VC06

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	9,257	85	7,868	15	1,389	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	1,389	0	0	100	1,389	0	0	0	0
Notes:_										
107/1:Steel Opn Girder/Beam	ft	1,276	100	1,276	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	82	89	73	11	9	0	0	0	0
1130/3:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes:_										
215/3:Re Conc Abutment	ft	98	84	82	16	16	0	0	0	0
1130/3:Cracking (RC and Other)	ft	56	71	40	29	16	0	0	0	0
Notes:_										
312/1:Enclosed Bearing	each	10	100	10	0	0	0	0	0	0
313/1:Fixed Bearing	each	10	100	10	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	509	96	489	4	20	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	5	0	0	250	5	0	0	0	0
Notes:_										
1090/1:Exposed Rebar	ft	5	0	0	250	5	0	0	0	0
Notes:_										
1130/1:Cracking (RC and Other)	ft	53	81	43	19	10	0	0	0	0
Notes:_										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Moderate popouts on deck. Midspan steel beams have no camber. Old timber piling from a previous structure is pushing out of the ground and hitting beam #2 by the east abutment.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: VC07

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Barnes	26 Functional	Urban, Local
04 City	VALLEY CITY CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5TH AVE SE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 59' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	576461.9 5197085.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 47 85 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 22 40 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1989 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	4 Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	2,225 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	2.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	December 13, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	58 Ft.	Other Special	N
49 Structure Length	170.93 Ft.	218 Channel Profile	Y 48 04/14/2014
50 Curb/Sidewalk Widths	6.9 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	29.9 Ft.	213 Federal Aid Project Number	BRO-2(13)
52 Deck Width	39.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: VC07

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/4:Re Concrete Deck	sq.ft	5,134	57	2,924	43	2,210	0	0	0	0
1190/4:Abrasion(PSC/RC)	sq.ft	2,210	0	0	100	2,210	0	0	0	0
Notes: _										
104/4:Pre Clsd Box Girder	ft	856	100	856	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	69	100	69	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	79	94	74	6	5	0	0	0	0
1130/3:Cracking (RC and Other)	ft	9	44	4	56	5	0	0	0	0
Notes: _										
331/4:Re Conc Bridge Railing	ft	341	97	330	3	11	0	0	0	0
1130/4:Cracking (RC and Other)	ft	40	73	29	28	11	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: VC08

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Barnes	26 Functional	Urban, Minor Arterial
04 City	VALLEY CITY CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	09064 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	NORTH VALLEY ROAD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.380	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 59' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	576356.9 5199134.1	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	—	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 52
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 21
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2012 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	5 Highway-pedestrian - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	1,400 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	December 18, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	32.0 Ft.	Underwater	N
48 Length of Max Span	82 Ft.	Other Special	N
49 Structure Length	214.00 Ft.	218 Channel Profile	Y 48
50 Curb/Sidewalk Widths	12.0 Ft Rt-Side	Chaining Date	04/14/2014
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	None
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/21/2013
	32.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	45.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: VC08

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	9,630	99	9,560	1	70	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	70	0	0	100	70	0	0	0	0
Notes: _										
1130/1:Cracking (RC and Other)	sq.ft	70	100	70	0	0	0	0	0	0
Notes: _										
520/1:Conc Re Prot Sys	sq.ft	9,630	100	9,630	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	1,284	100	1,284	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	86	100	86	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	98	100	98	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	247	100	247	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	428	100	428	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Open joint between ends of approach slabs and road.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 03-115-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Benson	26 Functional	Rural, Local
04 City	YORK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 SOUTH YORK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 17' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 31' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	460884.5 5349356.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	45 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	27 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	212 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1932 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	5 30 Year of ADT 2018	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 14, 2018
32 Approach Roadway Width	11 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 07/25/2019
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	11/08/2017
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Trottier, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 03-115-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	764	100	764	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	180	100	180	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	49	100	49	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	59	100	59	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: One foot of dirt on deck. Lacks all signing. Two foot deep scour hole under bridge. Underwater 9-2005.

Alert Code 2: 8/30/2012 - West Abutment has moved in 6". 10/7/2014 - No change in movement. 11/1/2016 - No change in movement. 11/14/18 - No change in movement.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 03-119-06.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	80.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Benson	26 Functional	Rural, Major Collector
04 City	LEEDS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00319 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH LEEDS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	31.593	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 16' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 26' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	467499.9 5347761.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	5 Moderate Damage
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1951 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 14, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.9 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	34.12 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Trottier, Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14X8X30' MULTIPLATE		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 03-119-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	59	0	0	66	39	34	20	0	0
1900/3:Distortion	ft	59	0	0	66	39	34	20	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
330/2:Metal Bridge Railing	ft	69	86	59	15	10	0	0	0	0
7000/2:Damage	ft	69	86	59	15	10	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0

Remarks: NBI Remarks: No riprap. Four to 6 inch buckle along flow line on both pipe. 10/7/2014 - Guardrail does not meet standards, it is only about 10" from road to top of square tubing.

Alert Code 2: Large scour hole on outlet end of pipes due to poor alignment.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 03-137-36.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Benson	26 Functional	Rural, Local
04 City	ROCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 9 SO. FORT TOTTEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Indian Reservation Road (IRR)
16 Latitude	47d 51' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 02' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	496999.5 5300101.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 41 74 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 31 57 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	7 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	October 31, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	67 Ft.	Other Special	N
49 Structure Length	134.00 Ft.	218 Channel Profile	1 48 07/25/2019
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/14/2018
	28.0 Ft.	213 Federal Aid Project Number	BRO-CNOC-0003(050)
52 Deck Width	30.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Trottier, Horn
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	2 In-Place, Functioning
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 03-137-36.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,020	100	4,020	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	536	100	536	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	28	100	28	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	60	100	60	0	0	0	0	0	0
313/1:Fixed Bearing	each	12	100	12	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	268	100	268	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 9/2018 - Replaced with a new spread box beam.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 03-141-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Benson	26 Functional	Rural, Local
04 City	TWIN TREE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 8 SO FORT TOTTEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	lian Reservation Road (IRR)
16 Latitude	47d 51' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 57' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	502603.5 5301145.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 48 88 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 23 43 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1976 106 Yr Reconstructed -1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	35 30 Year of ADT 2018	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	8 Miles	113 Scour Critical	7 Countermeasures
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 31, 2018
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	57 Ft.	218 Channel Profile	1 48 07/29/2019
49 Structure Length	60.04 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	11/09/2017
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	OS-3(1)
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Trottier, Horn
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 03-141-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,808	100	1,808	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	240	100	240	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	121	100	121	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	121	100	121	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Lacks all signs. Minor cracking on wingwalls. Inadequate riprap around abutments. 10/7/2014 - Still inadequate riprap around bridge abutment. Scour starting under the wing and abutment on the SW corner. Minor cracking on wingwalls and abutments.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-103-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	80.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Billings	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00401 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ROOSEVELT CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	14N. 10 W. SENTINEL BUTTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	26.295	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 09' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 36' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	150348.8 5232358.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	66 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	37 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	403 Other	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1995 106 Yr Reconstructed -1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	8 Equal Desirable
29 ADT	20 30 Year of ADT 2018	72 App. Rdwy. Alignment	3 Intolerable - Correct
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	1 1 1 1
19 Bypass, Detour Length	16 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 25, 2018
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	14.8 Ft.	Other Special	N
48 Length of Max Span	47 Ft.	218 Channel Profile	Y 48 06/13/2015
49 Structure Length	47.90 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	11/16/2017
51 Bridge Rdwy Width - Curb to Curb	13.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-103-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	194	100	194	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	33	100	33	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	95	100	95	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Sharp curves east & west of structure. East abutment slope is eroding away. Minor cracks on west & east abutment walls with efflorescent staining. Minor popouts on deck. South barrier has spalling on top. 10/2010 - Minor staining on both abutments. Also some minor cracking on both barriers. 6/13/2014 - East embankment approx. 10' to 15' from abutment continues to erode. (Slope 1;1) 9/25/18-Beaver Dam s-side stream, bolt missing se side guard rail at bridge, lot of over burden under guard rail at bottom of rail.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-103-20.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Billings	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00401 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WANNAGAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 N. 10 E. SENTINEL BUTTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	14.797	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 03' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 36' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	149468.5 5221159.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1995 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	26 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	September 25, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.7 Ft.	Underwater	N
48 Length of Max Span	24 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Martin, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
SINGLE, 24-5X14X72' SPP W/HEADWALLS		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-103-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/2:Steel Culvert	ft	72	94	68	6	4	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8402/2:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: NBI Remarks: Erosion starting next to the se headwall. Channel has a small amount of buildup through pipe.
6/13/2014 - Crack on NE headwall. 10/07/2016 - Little bit of a swale on middle of pipe. 9-25-18-Tree across N
end of pipe , pipe has water in it.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-104-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Billings	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ANDREWS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTHWEST OF MEDORA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 35' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	150332.8 5206845.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 39 70 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 23 42 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 25, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	69 Ft.	Other Special	N
49 Structure Length	142.06 Ft.	218 Channel Profile	Y 48 06/13/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	11/16/2017
52 Deck Width	31.2 Ft.	213 Federal Aid Project Number	BRO-4(12)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Martin, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-104-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,402	100	4,402	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	561	100	561	0	0	0	0	0	0
210/2:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/3:Metal Bridge Railing	ft	285	100	285	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	285	100	285	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Deep scour hole in river embankment se side of bridge. Riprap on channel banks by abutments.
6/10/2014 - Minor cracks on deck. Some minor efflorescent staining under deck. 9-25-18-Collision SE guard rail

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-106-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Billings	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ASH COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	14 NORTH 1 WEST OF MEDORA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 07' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 32' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	155444.0 5228592.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 38 70 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	50 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	September 24, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	78 Ft.	Other Special	N
49 Structure Length	82.02 Ft.	218 Channel Profile	Y 48 06/17/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/04/1996
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	BRO-4(2)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-106-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,702	100	2,702	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	322	100	322	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	164	99	162	1	2	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Erosion in ditch northeast corner. Some riprap placed in eroded ditch channel. Banks have a sharp drop off on bottom of riprap. Channel banks by abutments have riprap. 10/2010 - Minor staining on bottom of deck.. 6/9/2014 - Because of sandy soil north abutment embankment is being washed away, and undermining rip rap causing it to fall into channel.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-106-29.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Billings	26 Functional	Rural, Major Collector
04 City	MEDORA CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00434 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RAILROAD CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	EAST RIVER ROAD AT MEDORA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.047	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 40.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 31' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	155671.1 5205206.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2002 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	8 Desirable Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	260 30 Year of ADT 2016	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	18.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	36 Ft.	90 Date of Last Inspection	October 07, 2016
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	35.8 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	7.9 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	36.1 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	78.1 Ft.	213 Federal Aid Project Number	SC-FHO-0434(05) TEC-0434(052)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X12X78' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-106-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	156	100	156	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: South barrel has 6' of silt in it. 6/10/2014 - 24" RCP extends into south barrel of box culvert.
6/10/2014 - Utility running along inside wall of south barrel.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-106-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Billings	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SULLY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF MEDORA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Forest Highway (FH)
16 Latitude	46d 53' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 31' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	155237.4 5203114.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 42 76 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1982 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	175 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	15 Miles	36 Traffic Safety Features	0 0 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	September 25, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	67 Ft.	Other Special	N
49 Structure Length	70.87 Ft.	218 Channel Profile	Y 48 06/11/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/04/1996
52 Deck Width	32.5 Ft.	213 Federal Aid Project Number	BRO-4(4)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Martin, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-106-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,347	100	2,337	0	10	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	2,347	100	2,337	0	10	0	0	0	0
104/2:Pre Clsd Box Girder	ft	276	100	276	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	62	92	57	8	5	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	62	92	57	8	5	0	0	0	0
330/3:Metal Bridge Railing	ft	141	100	141	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	141	100	141	0	0	0	0	0	0
Notes: _										
331/2:Re Conc Bridge Railing	ft	141	100	141	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-107-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Billings	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	FRANKS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	10 NORTH OF MEDORA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 04' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 31' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	156326.7 5222929.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1992 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	14 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 24, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	82 Ft.	Other Special	N
49 Structure Length	85.96 Ft.	218 Channel Profile	Y 48 06/17/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	02/28/1996
52 Deck Width	31.2 Ft.	213 Federal Aid Project Number	BRO-4(11)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 04-107-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,669	100	2,669	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	335	100	335	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/3:Metal Bridge Railing	ft	171	100	171	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	171	100	171	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor cracking and staining bottom of deck. Channel banks east of structure are eroding.
10/27/2008- Scoria build up by curbs.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-108-18.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Billings	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00418 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	FRANKS CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	10 NORTH 1 EAST OF MEDORA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.800	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 04' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 30' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	157628.2 5222581.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 31 57 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	40 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	September 24, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	52 Ft.	Other Special	N
49 Structure Length	131.89 Ft.	218 Channel Profile	Y 48 06/17/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	12/10/1996
52 Deck Width	31.2 Ft.	213 Federal Aid Project Number	CP-4(53) SITE 1
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 04-108-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,090	100	4,090	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	522	100	522	0	0	0	0	0	0
210/2:Re Conc Pier Wall	ft	62	100	62	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/3:Metal Bridge Railing	ft	262	100	262	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	262	100	262	0	0	0	0	0	0
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Some riprap placed on bottom of channel. Slopes not complete under bridge by abutments. NBI Remarks: Minor popouts over entire deck. 6/9/2014 - SW corner of abutment has erosion. Some rip rap has been placed in hole. Channel erosion under bridge due to lack of riprap. Riprap has been placed beyond wings all four corners. 10/27/2008 - Scoria building up along curbs. 10/2010 - Minor staining on underside of deck. 9/30/16 - NE corner of abutment has sunk. Hole is 4'x4'x2.5' deep with some rock in it. Between rock hole can be seen to be deeper yet.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-109-19.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Billings	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00418 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	FRANKS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	10 NORTH 2 EAST OF MEDORA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.149	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 03' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 29' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	159208.7 5221944.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 28 52 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	40 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	September 24, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	124.02 Ft.	218 Channel Profile	1 48 04/12/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	12/10/1996
52 Deck Width	31.2 Ft.	213 Federal Aid Project Number	CP-4(53) SITE 2
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-109-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,843	100	3,843	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	489	100	489	0	0	0	0	0	0
210/2:Re Conc Pier Wall	ft	56	100	56	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/3:Metal Bridge Railing	ft	249	100	249	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	249	100	249	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Riprap only on lower portion of slope on channel banks. NBI Remarks: Minor popouts on deck. 10/27/2008- Scoria building up along curbs 10/2010 - Minor staining on NW backwall. Also some spalling and hairline cracks on curb.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-110-19.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Billings	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00418 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	FRANKS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	10 NORTH 3 EAST OF MEDORA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.650	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 03' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 28' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	160058.2 5222063.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 28 52 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	40 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 24, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	72 Ft.	Other Special	N
49 Structure Length	76.12 Ft.	218 Channel Profile	Y 48 06/17/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/04/1996
52 Deck Width	31.2 Ft.	213 Federal Aid Project Number	CP-4(53) SITE 3
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-110-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,357	100	2,357	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	295	100	295	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/3:Metal Bridge Railing	ft	151	100	151	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	151	100	151	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor popouts over entire deck. 10/2010 - Hairline cracks on curb between posts. 6/9/2014 - Approx. 2 to 3" of gravel build up along curbs. 9/30/2016 - Hairline cracking on underside of deck with efflorescent staining.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-119-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Billings	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	Creek	102 Direction of Traffic	2 2-way traffic
09 Location	1 North 3 West Belfield	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 15' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	176192.8 5204112.7	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	9 No Deficiencies
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 9 17 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 8 15 Tons
208 Dk Overburden	1 None	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	1901 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	November 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.2 Ft.	Underwater	N
48 Length of Max Span	20 Ft.	Other Special	N
49 Structure Length	20.20 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	17.2 Ft.	212 Structure Load Rated	08/09/2019
52 Deck Width	18.5 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Abdelmokarm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	0.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-119-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	411	100	411	0	0	0	0	0	0
1150/1:Check/Shake	sq.ft	10	100	10	0	0	0	0	0	0
Notes:Some minor checks on deck surface. - 11/25/2019										
206/1:Timber Column	each	18	94	17	6	1	0	0	0	0
1150/1:Check/Shake	each	1	0	0	100	1	0	0	0	0
Notes:The SE column has a significant check at the mid point of the column. - 11/25/2019										
216/1:Timber Abutment	ft	40	100	40	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	40	100	40	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	44	0	0	77	34	23	10	0	0
1140/1:Decay/Section Loss	ft	44	0	0	77	34	23	10	0	0
Notes:The south end of the east & west rail is broken off. The rest of the rail is beginning to have some section loss and signs of decay. - 11/25/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: There is fence across the east side of the structure. - 11/25/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-119-33.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Billings	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 SOUTH OF FRYBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 15' 09.00"	112 NBIS Bridge Length	No
GPS Coordinates XY	175814.7 5197066.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 41 75 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	Tons
Age and Service		Appraisal	
27 Yr Built	2018 106 Yr Reconstructed	67 Structural Condition	9 Above Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	N Not applicable (NBI)
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	10 30 Year of ADT 2018	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic		36 Traffic Safety Features	N N 1 1
19 Bypass, Detour Length	4 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 25, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	20 Ft.	218 Channel Profile	0 0
49 Structure Length	20.00 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	10/24/2018
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	213 Federal Aid Project Number	COIA-0004(054)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
SINGLE 20 X 9 X 52' PCBC			

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-119-33.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	52	100	52	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: 10/2018 - Bridge replaced with PCBC.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-124-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Billings	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GREEN RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 7 NORTH OF FRYBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 04' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 09' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	184184.2 5221030.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 36 66 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	September 24, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	67 Ft.	Other Special	N
49 Structure Length	71.85 Ft.	218 Channel Profile	Y 48 06/18/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	212 Structure Load Rated	03/04/1996
52 Deck Width	34.4 Ft.	213 Federal Aid Project Number	CBP-4(39)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-124-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,271	100	2,271	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	279	100	279	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	69	100	69	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	144	72	104	28	40	0	0	0	0
7000/3:Damage	ft	144	72	104	28	40	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Riprap on slopes by abutments. NBI Remarks: 10/2010 - Minor cracking on deck. Also efflorescent staining starting under deck. 6/12/2014 - SE Bridge marker down.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-126-17.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Billings	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00418 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 7 SOUTH FAIRFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	20.996	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 04' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 07' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	187008.7 5222506.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 23 43 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1984 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 24, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	62 Ft.	Other Special	N
49 Structure Length	65.94 Ft.	218 Channel Profile	Y 48 06/17/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/04/1996
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	BRO-4(8)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-126-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,981	100	1,981	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	256	100	256	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	131	100	131	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Fence across channel. 6/10/2014 - Gravel buildup along curbs.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-127-06.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Billings	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00408 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	KNIFE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 3 NORTH FAIRFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.198	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 14' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 05' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	190021.7 5240430.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 23 43 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1982 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	80 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	11 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	September 24, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	67 Ft.	Other Special	N
49 Structure Length	71.85 Ft.	218 Channel Profile	Y 48 06/10/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	02/22/2002
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	CBRS-48(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-127-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,303	100	2,303	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	279	100	279	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	144	90	130	10	14	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
1090/3:Exposed Rebar	ft	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	ft	6	0	0	100	6	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Some embankment erosion up stream. Sheet piling driven 50' east of structure to break water flow.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-127-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Billings	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GREEN RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 11 SOUTH FAIRFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 02' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 05' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	188816.8 5217569.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 37 67 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	26 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 24, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	70 Ft.	Other Special	N
49 Structure Length	74.15 Ft.	218 Channel Profile	Y 48 06/18/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/04/1996
52 Deck Width	31.5 Ft.	213 Federal Aid Project Number	BRO-4(9)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-127-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,336	100	2,336	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	289	100	289	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/3:Metal Bridge Railing	ft	148	100	148	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	148	100	148	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10/28/2008- Scoria building up along the curb on both sides. NBI Remarks: Fence across channel upstream
 11/2010 - Minor cracking on deck and concrete curb. 6/12/2014 - Minor efflorescent staining under deck.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 04-129-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Billings	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GREEN RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	8 EAST 12 SOUTH FAIRFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 01' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 03' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	191965.2 5216135.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 46 83 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1946 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	26 30 Year of ADT	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	2018 -1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	September 24, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	Y 48 06/18/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	11/17/2017
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	SRS-5-141(01)098
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 04-129-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	400	100	400	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	94	62	6	4	0	0	0	0
1130/1:Cracking (RC and Other)	ft	66	94	62	6	4	0	0	0	0
330/3:Metal Bridge Railing	ft	98	100	98	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	98	100	98	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Sheet pile driven 50 feet upstream. Deck has minor spalls at construction joints. Fence across channel east side. 6/13/2014 - NW wing has water seeping thru wall approx. 2' long and 1' from bottom if ground thru crack. All four outside corners just past concrete rail have severe cracking. Metal rail west missing two bolts on post. Minor cracking on abutments. 9/29/2016 - Minor cracking on bottom of tee beams extending up the sides of both legs.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-104-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	CUT BANK TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CUT BANK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 2 NORTH OF MOHALL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 47' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 25' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	321839.7 5407198.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	2 Concrete Precast Panel	64 Oper. Rating	HS 40 72 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 25 45 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden N	Not Applicable	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	2009 106 Yr Reconstructed -1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	N Not applicable (NBI)
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic		36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 21, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	48 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	N
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	213 Federal Aid Project Number	BRO-0005(23)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
10'x12'x68' Double RCB			

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-104-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	136	99	134	2	2	0	0	0	0
1010/1:Cracking	ft	136	99	134	2	2	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 9/21/2018 - Minor cracking with effloresence in both parapets.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-105-13.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	HOFFMAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CUT BANK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	10 SOUTH 5 WEST ANTLER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 49' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 24' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	323784.1 5410354.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	19 Ft.	90 Date of Last Inspection	September 21, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	29.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/22/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 14 X 8 X 80' PCRBC		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-105-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	160	100	160	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-110-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	MOUNT ROSE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CUT BANK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 1 SOUTH MAXBASS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 42' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 17' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	331714.0 5397175.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2012 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	29.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/11/2012
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0005(024)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Devries, Medler, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 14' X 7' X 48' PRCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-110-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	96	100	96	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-114-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	MOUNT ROSE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CUT BANK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 3 SOUTH MAXBASS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 40' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 12' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	337826.5 5393766.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	26 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2012 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	October 23, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	38.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	07/17/2013
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0005(028)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-114-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	144	100	144	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Triple RCB

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-128-12.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Major Collector
04 City	EIDSVOLD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00527 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK BED	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 5 SOUTH WESTHOPE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	10.198	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 50' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 53' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	361706.7 5411076.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2006 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	65 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	September 28, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	42.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	38.06 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	S-815(01)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
TRIPLE, 12 X 12 X 104' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-128-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	312	100	312	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0
8402/1:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: HAIRLINE CRACKS IN BOTH PARAPETS. Divider in East headwall 3" out of alignment.

Alert Code 1: 9/28/2018 - Moderate erosion at west end along wings and between boxes.

Alert Code 2: 9/28/2018 - Centerwall, South divider in end section destroyed by ice.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-129-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	EIDSVOLD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BOUNDARY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 6 SOUTH WESTHOPE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 48' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 51' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	363255.5 5408182.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2002 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	55 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	September 28, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	52.8 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	51.8 Ft.	213 Federal Aid Project Number	
52 Deck Width	54.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
DOUBLE, 14X12X54' PRECAST RCB			

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-129-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/2:Re Conc Culvert Precast	ft	108	98	106	0	0	0	0	2	2
7000/2:Damage	ft	2	0	0	0	0	0	0	100	2
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Hairline cracks in both parapets. Small amount of rip rap in north barrel, west & east ends.

Alert Code 2: 9/28/2018 - End section centerwalls, also parapet section centerwall on East end destroyed by ice. Knocked away from box.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-129-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	41.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	KANE TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SOURIS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 1 EAST OF NEWBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 46' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 52' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	362460.9 5404399.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	4	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 6 11 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 3 7 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	08 Tons
Age and Service		Appraisal	
27 Yr Built	1949 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	45 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 28, 2018
32 Approach Roadway Width	19 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 06/12/2017
49 Structure Length	125.98 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	11/28/2017
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-129-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	2,928	0	0	100	2,928	0	0	0	0
1180/1:Abrasion	sq.ft	2,928	0	0	100	2,928	0	0	0	0
111/1:Timber Open Girder	ft	1,637	0	0	96	1,576	4	61	0	0
1150/1:Check/Shake	ft	1,637	0	0	96	1,576	4	61	0	0
206/1:Timber Column	each	32	0	0	97	31	3	1	0	0
1150/1:Check/Shake	each	32	0	0	97	31	3	1	0	0
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	25	0	0	100	25	0	0	0	0
4000/1:Settlement	ft	24	0	0	100	24	0	0	0	0
235/1:Timber Pier Cap	ft	121	0	0	100	121	0	0	0	0
1150/1:Check/Shake	ft	121	0	0	100	121	0	0	0	0
332/1:Timb Bridge Railing	ft	253	0	0	100	253	0	0	0	0
1150/1:Check/Shake	ft	253	0	0	100	253	0	0	0	0
8401/1:Wings	each	4	0	0	50	2	0	0	50	2
1140/1:Decay/Section Loss	each	2	0	0	50	2	0	0	0	0
1900/1:Distortion	each	2	0	0	0	0	0	0	100	2

Remarks: NBI Remarks: Sway bracing cracked on piers 2 & 3. Piling 3, 4, & 5 in east abutment have long deep splits. Horizontal brace in NW wing is ruptured. Plank at east end of girders tipped back, allowing gravel to be deposited on abutment cap. All columns have a bracing strape to hold cap to columns.West aboutment leaning in 3".
12/2010 - CENTERS DECAYING IN WING PILING.

Alert Code 1: Sink holes in NW, NE, & SW corners exposing edge of deck at each location.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-130-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	KANE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BOUNDARY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 SOUTH 2 WEST OF ROTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 48' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 50' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	364859.1 5407185.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	6 Corrugated Steel	63 Operating Rating Method	3 LRFR Load & Res. Fact
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 29 53 Tons
Membrane	0 None	65 Inventory Rating Method	3 LRFR Load & Res. Fact
Dk Protect	None	66 Inv. Rating	HS 23 42 Tons
208 Dk Overburden	28 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 N N N
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	August 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.2 Ft.	Underwater	N
48 Length of Max Span	74 Ft.	Other Special	N
49 Structure Length	75.00 Ft.	218 Channel Profile	1 48
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	07/17/2019
	24.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Lawson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-130-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
30/1:Steel Deck - Orthotropic	sq.ft	1,856	100	1,856	0	0	0	0	0	0
113/1:Steel Stringer	ft	450	100	450	0	0	0	0	0	0
206/1:Timber Column	each	8	0	0	100	8	0	0	0	0
1150/1:Check/Shake	each	8	0	0	100	8	0	0	0	0
Notes:Weathered timber - 8/9/2019										
216/1:Timber Abutment	ft	30	0	0	100	30	0	0	0	0
1150/1:Check/Shake	ft	30	0	0	100	30	0	0	0	0
Notes:Weathering of timber - 8/9/2019										
225/1:Steel Pile	(EA)	8	100	8	0	0	0	0	0	0
231/1:Steel Pier Cap	ft	54	100	54	0	0	0	0	0	0
310/1:Elastomeric Bearing	each	12	100	12	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	150	100	150	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 8-9-19: Girders bear on new steel abutment caps. Original North timber abutment left in place acting as a retaining wall. - 8/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-132-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	70.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	STARBUCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BOUNDARY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH 4 WEST OF KRAMER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 38' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 47' 52.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	368017.0 5405018.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 26 48 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 20 36 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	201 Gravel/Dirt	209 Posted in "Tons"	12 Tons
Age and Service		Appraisal	
27 Yr Built	1949 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 23, 2018
32 Approach Roadway Width	21 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.5 Ft.	Other Special	N
48 Length of Max Span	21 Ft.	218 Channel Profile	1 48 06/13/2017
49 Structure Length	66.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	03/27/2018
51 Bridge Rdwy Width - Curb to Curb	28.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-132-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	1,927	100	1,927	0	0	0	0	0	0
206/1:Timber Column	each	28	0	0	100	28	0	0	0	0
1150/1:Check/Shake	each	28	0	0	100	28	0	0	0	0
216/1:Timber Abutment	ft	56	0	0	100	56	0	0	0	0
4000/1:Settlement	ft	56	0	0	100	56	0	0	0	0
235/1:Timber Pier Cap	ft	112	0	0	95	106	5	6	0	0
1140/1:Decay/Section Loss	ft	6	0	0	0	0	100	6	0	0
1150/1:Check/Shake	ft	106	0	0	100	106	0	0	0	0
332/1:Timb Bridge Railing	ft	135	0	0	100	135	0	0	0	0
1150/1:Check/Shake	ft	135	0	0	100	135	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: NBI Remarks: Erosion back of connection between wing and abutment in SW corner. Slight settlement of a couple of north abutment piling. Cable has been attached from first abutment pile in NW corner to wing pile. Moderate channel scour under and to west of bridge. south abutment, third piling from west, is split & leaning towards creek. Piling 1 & 6 in north abutment leaning outward 3". 11/2018 - Load Limit Signs Missing.

Alert Code 1: 6' of SW abutment cap starting to dry rot.

Alert Code 2: Wingwalls attach to structure approx. 2.5 feet in from deck edge leaving vertical drop back of abutment extremely close to traveled way. Bottom of south abutment completely exposed by scour. Bottom of abutment planks pushing toward channel due to lack of support.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-133-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	60.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	STARBUCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BOUNDARY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 NORTH 3 WEST OF KRAMER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 47' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 46' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	369648.6 5405890.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 13 23 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 9 17 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	15 Tons
Age and Service		Appraisal	
27 Yr Built	1952 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 16, 2019
32 Approach Roadway Width	19 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	21 Ft.	218 Channel Profile	1 48 06/13/2017
49 Structure Length	66.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	12/13/2017
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-133-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,561	0	0	100	1,561	0	0	0	0
1180/1:Abrasion	sq.ft	1,561	0	0	100	1,561	0	0	0	0
111/1:Timber Open Girder	ft	1,122	0	0	94	1,058	6	64	0	0
1150/1:Check/Shake	ft	1,058	0	0	100	1,058	0	0	0	0
Notes:Weathered timber - 9/16/2019										
1160/1:Crack (Timber)	ft	64	0	0	0	0	100	64	0	0
202/1:Steel Column	each	10	100	10	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
206/1:Timber Column	each	10	90	9	0	0	10	1	0	0
1170/1:Split/Delamination (Timber)	each	1	0	0	0	0	100	1	0	0
Notes:10/2010 - CENTER PILING IN S ABUT HAS LARGE VERT SPLIT @ TOP. - 9/16/2019										
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
Notes:Weathered timber - 9/16/2019										
235/1:Timber Pier Cap	ft	95	53	50	47	45	0	0	0	0
1150/1:Check/Shake	ft	45	0	0	100	45	0	0	0	0
Notes:Weathered timber - 9/16/2019										
332/1:Timb Bridge Railing	ft	135	100	135	0	0	0	0	0	0
Notes:Replaced new in Fall of 2018 - 9/16/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Removed Alert Code #3. Repairs were made in the Fall of 2018. - 9/16/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-133-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	STARBUCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BOUNDARY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 NORTH 4 WEST OF KRAMER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 47' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 47' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	368771.7 5405456.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	6 Corrugated Steel	63 Operating Rating Method	3 LRFR Load & Res. Fact
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 26 47 Tons
Membrane	0 None	65 Inventory Rating Method	3 LRFR Load & Res. Fact
Dk Protect	None	66 Inv. Rating	HS 20 36 Tons
208 Dk Overburden	28 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 N N N
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	August 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.2 Ft.	Underwater	N
48 Length of Max Span	65 Ft.	Other Special	N
49 Structure Length	66.00 Ft.	218 Channel Profile	1 48
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	24.2 Ft.	212 Structure Load Rated	07/18/2019
52 Deck Width	24.8 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Lawson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	0.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-133-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
30/1:Steel Deck - Orthotropic	sq.ft	1,634	100	1,634	0	0	0	0	0	0
113/1:Steel Stringer	ft	396	100	396	0	0	0	0	0	0
206/1:Timber Column	each	10	0	0	100	10	0	0	0	0
1150/1:Check/Shake	each	8	0	0	100	8	0	0	0	0
Notes:Weathered timber - 8/9/2019										
1170/1:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes:2nd and 4th column from the South have full length splits. - 8/9/2019										
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
Notes:Weathered timber - 8/9/2019										
225/1:Steel Pile	(EA)	8	100	8	0	0	0	0	0	0
231/1:Steel Pier Cap	ft	48	100	48	0	0	0	0	0	0
310/1:Elastomeric Bearing	each	12	100	12	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	132	100	132	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Girders bear on new metal abutment caps. original timber abutments left in place. - 8/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-133-16.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	50.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	STARBUCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BOUNDARY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 NORTH 3 WEST OF KRAMER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 47' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 46' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	369643.0 5405600.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 15 27 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 10 19 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1970 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 23, 2018
32 Approach Roadway Width	19 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 06/13/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	12/13/2017
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-133-16.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	581	0	0	100	581	0	0	0	0
1180/1:Abrasion	sq.ft	581	0	0	100	581	0	0	0	0
111/1:Timber Open Girder	ft	456	0	0	100	456	0	0	0	0
1150/1:Check/Shake	ft	456	0	0	100	456	0	0	0	0
206/1:Timber Column	each	10	0	0	90	9	0	0	10	1
1150/1:Check/Shake	each	9	0	0	100	9	0	0	0	0
7000/1:Damage	each	1	0	0	0	0	0	0	100	1
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
235/1:Timber Pier Cap	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
332/1:Timb Bridge Railing	ft	49	0	0	67	33	0	0	33	16
1150/1:Check/Shake	ft	33	0	0	114	33	0	0	0	0
7000/1:Damage	ft	16	0	0	0	0	0	0	100	16
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	50	2	50	2	0	0	0	0
1170/1:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0

Remarks: NBI Remarks: Horizontal braces in both abutments are cracked. Decay developing around knot in south abutment cap. Riprap dumped several feet shorter than abutment planks. Riprap dumped back of wing ran under the wing and now partially protects inslope. SE wing leaning toward stream. Abutment 2 leaning inward 3"; cap bearing on back of piling. 8' of bridge rail broke on north end of both rails. Moderate washouts behind both South wings. Broke planking in both North wings.

Alert Code 2: Bottom of south abutment exposed. 10/2010 - 2ND PILING, FROM E, ABUT 1 IS BROKED. 1ST PILING ONLY BEARING 25% & STARTING TO DRY ROT. A CABLE HAS BEEN RUN BETWEEN 1ST & 3RD PILING AS A BRACE. FIRST PILING AT W END OF ABUT 2 IS MISSING. ABUT CAP IS BENDING DOWNWARD FROM WEIGHT OF GIRDERS.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-134-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	EIDSVOLD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BOUNDARY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 NORTH 2 WEST OF KRAMER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 48' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 45' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	370307.0 5407436.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 26 46 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 15 28 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1969 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	10 Ft.	90 Date of Last Inspection	October 23, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	45.93 Ft.	218 Channel Profile	1 48 06/19/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/13/2017
	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-134-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	344	50	172	50	172	0	0	0	0
1110/1:Cracking (PSC)	ft	172	0	0	100	172	0	0	0	0
206/1:Timber Column	each	14	0	0	100	14	0	0	0	0
1150/1:Check/Shake	each	14	0	0	100	14	0	0	0	0
216/1:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
1150/1:Check/Shake	ft	59	100	59	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
1150/1:Check/Shake	ft	59	100	59	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	92	100	92	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No bridge rails. Moderate washout by outer half of NE wing. Minor collision damage to NE wing. Moderate scour approx. 15' south of bridge. Channel under bridge is rip rapped. No end markers. Seams, between prestressed box beams, were left ungrouted. West abutment has minor collision damage of horizontal bracing & piling.

Alert Code 1: Beams 3, 4, 7, & 8 from south have longitudinal cracks on the top driving surface.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-134-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	STARBUCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BOUNDARY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 NORTH 2 WEST OF KRAMER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 47' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 45' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	371249.4 5405344.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 34 61 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 37 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1970 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 23, 2018
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.6 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 06/19/2017
49 Structure Length	25.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	06/28/2017
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-134-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	207	100	207	0	0	0	0	0	0
206/1:Timber Column	each	14	0	0	100	14	0	0	0	0
1150/1:Check/Shake	each	14	0	0	100	14	0	0	0	0
216/1:Timber Abutment	ft	66	0	0	100	66	0	0	0	0
1150/1:Check/Shake	ft	66	0	0	100	66	0	0	0	0
235/1:Timber Pier Cap	ft	66	0	0	100	66	0	0	0	0
1150/1:Check/Shake	ft	66	0	0	100	66	0	0	0	0
331/1:Re Conc Bridge Railing	ft	52	96	50	0	0	4	2	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1900/1:Distortion	each	1	0	0	100	1	0	0	0	0

Remarks: NBI Remarks: Channel scour along abutments has been rip rapped middle horizontal brace in SE wing is ruptured. Moderate channel scour under and adjacent to bridge. North abutment cap moderately weather checked. All horizontal bracing, in SE wing, are ruptured. No bridge rails. End markers missing in all corners. 10/23/2018 - Riprap added at both abutments and below the bridge.

Alert Code 1: Bottoms of both abutments exposed by scour.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-136-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	SCANDIA TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BOUNDARY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 2 WEST OF SOURIS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 56' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 43' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	374074.1 5421908.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1994 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	19 Ft.	90 Date of Last Inspection	September 26, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	18.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	COUNTY PROJECT
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 7-6X10-0X46' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-136-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/2:Re Conc Culvert Precast	ft	92	100	92	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Small gaps between a few of the precast box sections. Channel erosion has partially exposed headwall at north end east barrel. 2 inch gap at north end of north end section. 9-28-16 - Minor scour starting on North end of culvert. 9/26/18- 3" x 3" various spalls at the chain hook holes.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 05-136-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Applicable	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	EIDSVOLD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BOUNDARY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 1 WEST OF SOURIS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 51' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 42' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	374175.9 5413820.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden		70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	9 Above Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	19 Ft.	90 Date of Last Inspection	September 10, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	50.0 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	42.80 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
Steel 42' 9 5/8" X 43' 3" X 9' 11" Culvert.		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-136-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
220/1:Re Conc Pile Cap/Ftg	ft	152	100	152	0	0	0	0	0	0
Notes:Can not visually see the footing - 9/10/2019										
240/1:Steel Culvert	ft	50	100	50	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: _ - 9/10/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-136-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	STARBUCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BOUNDARY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 S .5 W OF WEST JCT.14&5	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 47' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 45' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	373816.5 5405754.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	91 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	55 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1970 106 Yr Reconstructed	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic		36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 22, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 01/01/2000
49 Structure Length	25.50 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	02/01/2018
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-136-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	204	100	204	0	0	0	0	0	0
216/1:Timber Abutment	ft	56	0	0	100	56	0	0	0	0
1150/1:Check/Shake	ft	56	0	0	100	56	0	0	0	0
228/1:Timber Pile	(EA)	12	0	0	100	12	0	0	0	0
1150/1:Check/Shake	(EA)	12	0	0	100	12	0	0	0	0
235/1:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Moderate dry rot at bottom of columns. Second column from the south in west abutment cracked at bottom.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-137-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	STARBUCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BOUNDARY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 S 1 E OF WEST JCT.14&5	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 47' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 41' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	376102.1 5406197.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 51 93 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 30 56 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	201 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1970 106 Yr Reconstructed	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic		36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 22, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.3 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 01/01/2000
49 Structure Length	25.50 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	02/01/2018
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-137-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	204	100	203	1	1	0	0	0	0
1090/1:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
216/1:Timber Abutment	ft	57	100	57	0	0	0	0	0	0
228/1:Timber Pile	(EA)	12	100	12	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	57	100	57	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10/22/2018 Concrete girder outside Northeast side has 1' of exposed rebar from poor consolidation.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-140-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	HARAM TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BOUNDARY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 4 NORTH OF SOURIS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 57' 29.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 37' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	381305.6 5424060.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2015 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	September 26, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	30.40 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/10/2015
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0005(032)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 12 X 12 X 115' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-140-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	230	100	230	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes: _										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: New structure in 2015.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-141-17.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	WHITBY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	STONE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 4 SOUTH BOTTINEAU	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 46' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 35' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	382485.2 5402907.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	61 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	37 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1970 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	5 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 26, 2018
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.6 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	0 0 07/30/2012
49 Structure Length	25.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	06/28/2017
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-141-17.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	207	90	187	10	20	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	20	0	0	100	20	0	0	0	0
206/1:Timber Column	each	14	0	0	100	14	0	0	0	0
1150/1:Check/Shake	each	14	0	0	100	14	0	0	0	0
216/1:Timber Abutment	ft	66	0	0	100	66	0	0	0	0
1150/1:Check/Shake	ft	66	0	0	100	66	0	0	0	0
235/1:Timber Pier Cap	ft	66	0	0	100	66	0	0	0	0
1150/1:Check/Shake	ft	66	0	0	100	66	0	0	0	0
331/1:Re Conc Bridge Railing	ft	52	100	52	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1170/1:Split/Delamination (Timber)	each	4	0	0	100	4	0	0	0	0

Remarks: Bridge located on section line trail. No timber bridge rails. Wing piles have several vertical weather cracks. 3-4' deep scour under and adjacent to bridge. Abutment footings not affected so far. No end markers. Bridge approaches moderately rough. Back of both west wingwalls unsupported from washouts. Erosion of channel on south side, not affecting bridge yet.

Alert Code 2: 2' x 2' x 5' sinkhole in SW corner exposing back of abutment.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-142-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	WHITBY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	STONE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH 2 EAST WHITE SPUR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 46' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 34' 37.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	384138.2 5403997.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 32 58 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	204 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1969 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	17 Ft.	90 Date of Last Inspection	September 26, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	1 48 06/19/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/28/2017
	27.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-142-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	207	76	157	15	30	10	20	0	0
1080/1:Delamination/Spall/Patched Area	ft	30	0	0	100	30	0	0	0	0
1090/1:Exposed Rebar	ft	20	0	0	0	0	100	20	0	0
206/1:Timber Column	each	14	0	0	100	14	0	0	0	0
1150/1:Check/Shake	each	14	0	0	100	14	0	0	0	0
216/1:Timber Abutment	ft	66	0	0	100	66	0	0	0	0
1150/1:Check/Shake	ft	66	0	0	100	66	0	0	0	0
235/1:Timber Pier Cap	ft	66	0	0	100	66	0	0	0	0
1150/1:Check/Shake	ft	66	0	0	100	66	0	0	0	0
331/1:Re Conc Bridge Railing	ft	52	100	52	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: One split piling in NW wingwall. No bridge rails. No end markers. Moderate silt deposit under west half of bridge. Scour at end of SE wing being caused by intersecting road ditch. Small washout by NW wing. 4'x6' arched pipe installed 25 ft. north of bridge. Several 2"x3" spalls found along bottoms of channel beams; small sections of reinforcing exposed. Spall developing along bottom of entire length of 7th beam from west.

Alert Code 1: Scour hole at SE corner of south abutment and along SE wing.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-147-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	PICKERING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	STONE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 2 WEST BOTTINEAU	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 50' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 28' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	391246.2 5410198.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1992 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 27, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	BRO-5(2)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
DOUBLE, 12X6X52' RCB			

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-147-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	105	94	99	6	6	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	5	0	0	100	5	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: There are small spalls around some of lifting holes. There are 3/4" to 1 1/2" gaps between precast barrel sections. Random hairline cracks with light efflorescence on west side of center wall between barrels, third section from north. Spalls developing along top of precast end sections next to construction joints. Large riprap is allowing runoff access to headwall. 9/27/2018 - 1 x 1 spall on NE wing at the joint.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-148-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	PICKERING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF BOTTINEAU	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 48' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 26' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	393833.7 5407029.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 41 75 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2012 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	September 27, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/10/2012
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0005(027)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
12' X 7' X 48' PRCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-148-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	96	100	96	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Alert Code 1: South barrel has 2' of silt built through entire length of barrel, North barrel 3'.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-151-26.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	WILLOW VALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 5 SOUTH OMEMEE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 38' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 22' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	398167.3 5387816.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	6	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2004 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 11, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	89.90 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0005(014)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
3-DOUBLE, 14X8X48' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-151-26.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	288	100	288	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 1st box from north has sediment in both barrels entire length. 2nd box, north barrel has sediment entire length. Exposed rebar between box culverts 1 & 2, flowable fill is gone. Top corners behind parapet on west and east side exposed. SW & SE corners of box also exposed.

Alert Code 2: Capping on concrete gone between box sections exposing flowable fill to erosion.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-153-21.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	WILLOW VALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK BED	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 1 NORTH OF OMEMEE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 42' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 20' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	401339.6 5396043.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1936 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 11, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X6X32.5' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-153-21.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	66	82	54	15	10	3	2	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
1090/2:Exposed Rebar	ft	10	0	0	200	10	0	0	0	0
8401/2:Wings	each	4	50	2	50	2	0	0	0	0
1130/2:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0

Remarks: NBI Remarks: Vertical hairline cracks in parapets. 0.50 to 4.0 mm diagonal cracks in all wingwalls. Minor deterioration of concrete below high water line. 1'x1' spall on north side of dividing wall near floor and another at lower SE corner. Moderate washout at outer end of SE wing. Minor silt deposit at west end of south barrel. Vertical spall 1'x2' at SE end of south barrel where it ties to SE wing. Short section of rebar exposed. No markers.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-154-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	WILLOW VALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK BED	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 3 SOUTH OF OMEMEE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 39' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 20' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	401380.6 5390630.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2007 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	October 11, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	0.0 Ft.	Underwater	N
48 Length of Max Span	13 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X5X48.5' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-154-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	96	100	96	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: Both parrapets have small spalls.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-154-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	52.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	WILLOW VALE TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK BED	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 1 WEST WILLOWCITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 38' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 19' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	402624.9 5389009.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 16 29 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 11 21 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1935 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	35 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 11, 2018
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	14 Ft.	218 Channel Profile	Y 48 06/16/2015
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	03/27/2018
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-154-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	721	100	721	0	0	0	0	0	0
111/1:Timber Open Girder	ft	745	0	0	100	745	0	0	0	0
1150/1:Check/Shake	ft	745	0	0	100	745	0	0	0	0
206/1:Timber Column	each	15	0	0	0	0	100	15	0	0
1140/1:Decay/Section Loss	each	15	0	0	0	0	100	15	0	0
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
235/1:Timber Pier Cap	ft	72	0	0	100	72	0	0	0	0
1150/1:Check/Shake	ft	72	0	0	100	72	0	0	0	0
332/1:Timb Bridge Railing	ft	62	0	0	100	62	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1140/1:Decay/Section Loss	each	4	0	0	100	4	0	0	0	0

Remarks: NBI Remarks: No bridge rails; curbs partially obscured by tall grass. Minor weather checking of structural members. Minor dirt deposit on east abutment cap. Riprap placed along abutment, moderate channel scour around pier. Sway brace broke on east side of pier. Span 1, girder 7, 8, & 9 have longitudinal cracks. Span 2, girders 1, 6, 14, 16, and 20 have diagonal or longitudinal cracks. Some cracks originate at ends of girders where they bear on east abutment cap. Pier 2 has long deep weather check length of cap.

Alert Code 1: 1-2" of backward rotation of east abutment cap has caused vertical splits in a few abutment piling. All piling in structure have mod. - severe decay.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-155-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	67.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	LORDSBURG TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK BED	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 2 EAST OF OMEMEE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 44' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 18' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	403897.6 5400267.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 15 27 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 11 20 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	25 Tons
Age and Service		Appraisal	
27 Yr Built	1934 106 Yr Reconstructed	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	7 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 11, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	13 Ft.	218 Channel Profile	Y 48 06/22/2015
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	03/27/2018
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-155-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	700	0	0	100	700	0	0	0	0
1150/1:Check/Shake	sq.ft	700	0	0	100	700	0	0	0	0
111/1:Timber Open Girder	ft	719	0	0	99	709	1	10	0	0
1150/1:Check/Shake	ft	709	0	0	100	709	0	0	0	0
1160/1:Crack (Timber)	ft	10	0	0	0	0	100	10	0	0
206/1:Timber Column	each	15	0	0	73	11	27	4	0	0
1150/1:Check/Shake	each	15	0	0	73	11	27	4	0	0
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
235/1:Timber Pier Cap	ft	72	0	0	100	72	0	0	0	0
1150/1:Check/Shake	ft	72	0	0	100	72	0	0	0	0
332/1:Timb Bridge Railing	ft	59	0	0	51	30	0	0	49	29
1150/1:Check/Shake	ft	30	0	0	100	30	0	0	0	0
7000/1:Damage	ft	29	0	0	0	0	0	0	100	29
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
7000/1:Damage	each	1	0	0	100	1	0	0	0	0

Remarks: NBI South curb missing. Abutment back plank have minor shifting. Second pile, from south, west abutment has large vertical check. North pile, west abut., has moderate weather check. Centers decaying in wing pile. Severe decaying in NW wing wall piling. Small washout back of SE wing. Moderate erosion of both sides of west approach roadway. NE wing horizontal plank is broken & so is vertical plank. No end markers. Span 2- Girder 9 and 20 horizontal crack. 10/11/2018 - North rail is missing. Load Limit Signs missing. Posted 4/17/19 per LG nmh - photo

Alert Code 1: Void sounded behind upper half of west abutment. Void extending under west bound driving lane.

Alert Code 2: Bottom of west abutment exposed nearly entire length, from channel scour. Some misalignment of abutment back plank. Moderate sink hole at NW corner of bridge.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-156-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	46.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	OSTBY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK BED	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH OF WILLOW CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 37' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 17' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	404368.0 5385738.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 7 14 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 5 10 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	12 Tons
Age and Service		Appraisal	
27 Yr Built	1938 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 10, 2018
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	14 Ft.	218 Channel Profile	Y 48 06/16/2015
49 Structure Length	44.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	12/21/2017
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-156-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,044	0	0	100	1,044	0	0	0	0
1150/1:Check/Shake	sq.ft	1,044	0	0	100	1,044	0	0	0	0
111/1:Timber Open Girder	ft	879	0	0	100	879	0	0	0	0
1150/1:Check/Shake	ft	879	0	0	100	879	0	0	0	0
206/1:Timber Column	each	21	0	0	100	21	0	0	0	0
1150/1:Check/Shake	each	21	0	0	100	21	0	0	0	0
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
235/1:Timber Pier Cap	ft	95	0	0	100	95	0	0	0	0
1150/1:Check/Shake	ft	95	0	0	100	95	0	0	0	0
332/1:Timb Bridge Railing	ft	89	0	0	66	59	17	15	17	15
1020/1:Connection	ft	15	0	0	0	0	100	15	0	0
7000/1:Damage	ft	15	0	0	0	0	0	0	100	15
4000/1:Settlement	each	1	100	1	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	3	0	0	100	3	0	0	0	0
1140/1:Decay/Section Loss	each	3	0	0	100	3	0	0	0	0

Remarks: NBI Remarks: South end of pier two has settled, slightly. Dirt deposits on both abutment caps. Channel scour under and adjacent to bridge (100'x15'x2'-4' deep), channel makes 90 degree turn south of bridge. Several of deck planks fire charred (under side of deck). Girders very weathered. No end markers. East abutment cap is weather checked. Centers decaying in wingwall piling. 12/2010 - E END OF NORTH BRIDGE RAILS LEANING OUT. 01/20/2015 - Southeast 15' of timber bridge rail missing. Span 1 - girder 10 & 15 have minor to moderate cracks.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-157-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	40.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	WELLINGTON TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2E OF WILLOW CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 36' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 15' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	407475.9 5384128.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 11 20 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 8 15 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	17 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 10, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	15.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	26.2 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	Y 48 06/16/2015
49 Structure Length	48.88 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	12/21/2017
51 Bridge Rdwy Width - Curb to Curb	26.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-157-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,292	0	0	100	1,292	0	0	0	0
1150/1:Check/Shake	sq.ft	1,292	0	0	100	1,292	0	0	0	0
111/1:Timber Open Girder	ft	912	0	0	98	890	2	22	0	0
1150/1:Check/Shake	ft	890	0	0	100	890	0	0	0	0
1170/1:Split/Delamination (Timber)	ft	22	0	0	0	0	100	22	0	0
206/1:Timber Column	each	21	0	0	95	20	5	1	0	0
1150/1:Check/Shake	each	20	0	0	100	20	0	0	0	0
1160/1:Crack (Timber)	each	1	0	0	0	0	100	1	0	0
216/1:Timber Abutment	ft	56	0	0	50	28	50	28	0	0
1150/1:Check/Shake	ft	28	0	0	100	28	0	0	0	0
4000/1:Settlement	ft	28	0	0	0	0	100	28	0	0
235/1:Timber Pier Cap	ft	85	0	0	100	85	0	0	0	0
1150/1:Check/Shake	ft	85	0	0	100	85	0	0	0	0
332/1:Timb Bridge Railing	ft	98	0	0	100	98	0	0	0	0
1150/1:Check/Shake	ft	98	0	0	100	98	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1900/1:Distortion	each	4	0	0	100	4	0	0	0	0

Remarks: NBI Remarks: Ninth girder, from east, cracked in two diagonally (span two). Abutment caps have large vertical cracks in NW and SE corners. Moderate washouts at outer end of all wing walls. South abutment leaning back 9.5" in SW corner. Bottoms of some of the planks shifting inward. Some scuffing of timber members from ice or debris. Some scour in south span, poor channel alignment. Dirt deposits on both abutments caps from gaps in back planks. Cap does not bear on outside two piling in NW and NE corners of north abutment; appears to be supported by spikes through cap. Piling in both abutments shifted inward so 1/2 caps width bearing on piling. Sway braces cracked. Large washout back of NE wing. Utility cable attached to west side of deck.

Alert Code 1: Bottom of south abutment partially exposed. 12 "x 12" hole in the 1st deck plank in NW corner.

Alert Code 2: 6" of settlement to west end of pier two. Sink hole in SW 1 1/2' x 1 1/2' x 4', sink hole in SE 1' x 1' x 4', both exposing back of wing and abutment.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-157-28.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	47.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	WELLINGTON TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2E 1N OF WILLOW CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 36' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 15' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	407558.5 5385461.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 13 24 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 9 17 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	205 Gravel/Dirt	209 Posted in "Tons"	23 Tons
Age and Service		Appraisal	
27 Yr Built	1939 106 Yr Reconstructed	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 10, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	14 Ft.	218 Channel Profile	Y 48 06/16/2015
49 Structure Length	45.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	03/27/2018
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-157-28.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,066	0	0	100	1,066	0	0	0	0
1150/1:Check/Shake	sq.ft	1,066	0	0	100	1,066	0	0	0	0
111/1:Timber Open Girder	ft	1,079	0	0	98	1,055	2	24	0	0
1150/1:Check/Shake	ft	1,055	0	0	100	1,055	0	0	0	0
1160/1:Crack (Timber)	ft	24	0	0	0	0	100	24	0	0
206/1:Timber Column	each	24	0	0	100	24	0	0	0	0
1150/1:Check/Shake	each	24	0	0	100	24	0	0	0	0
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
235/1:Timber Pier Cap	ft	95	0	0	86	82	14	13	0	0
1150/1:Check/Shake	ft	82	0	0	100	82	0	0	0	0
1900/1:Distortion	ft	13	0	0	0	0	100	13	0	0
332/1:Timb Bridge Railing	ft	92	0	0	100	92	0	0	0	0
1150/1:Check/Shake	ft	92	0	0	100	92	0	0	0	0
4000/1:Settlement	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
7000/1:Damage	each	4	0	0	100	4	0	0	0	0

Remarks: 11/2010 - STRUCTURE LOCATED ON SERIES OF "S" CURVES. SEVERAL PILING & SWAY BRACING ARE MINOR TO MODERATELY WEATHER CHECKED. SW PILING & 1ST S ABUT PILING APPEAR TO HAVE HEAVED UPWARD CRACKING STABILIZING PLANKS & CAUSING ABUT CAP TO START TIPPING. ALL WING WALL PILING HAVE MINOR TO MODERATE SNOW PLOW DAMAGE.END MARKERS MISSING.10/10/2018 - Load Limit signs missing. Posted 4/17/19 per LG nmh - photo

Alert Code 1: 1ST 3 DECK PLANK IN SW CORNER ARE ROTTED WITH 6"X6" HOLE. 1ST DECK PLANK IN NE CORNER HAS 2' SECTION MISSING. PLANKS ACROSS ENDS OF GIRDERS ROTTED ALLOWING DIRT TO ACCUMULATE ON ABUT CAPS.1/20/2015 - ENDS OF 1ST 6 GIRDERS IN NW CORNER HAVE LIFTED UP & NO LONGER BEAR ON CAP. 10/10/2018 - DIAGONAL OR LONGITUDINAL CRACKS, from the North, IN SPAN 1 - GIRDER 1 & 10, SPAN 2 - GIRDER 1,14,16 & 24, SPAN 3 - GIRDER 1,9,11 & 20.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-158-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	45.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	WELLINGTON TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2E 1N OF WILLOW CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 37' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 15' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	407840.4 5385684.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 12 23 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 8 16 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	207 Gravel/Dirt	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1935 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 10, 2018
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.3 Ft.	Other Special	N
48 Length of Max Span	13 Ft.	218 Channel Profile	Y 48 06/16/2015
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	03/27/2018
51 Bridge Rdwy Width - Curb to Curb	22.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-158-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	538	0	0	100	538	0	0	0	0
1150/1:Check/Shake	sq.ft	538	0	0	100	538	0	0	0	0
111/1:Timber Open Girder	ft	719	0	0	100	719	0	0	0	0
1150/1:Check/Shake	ft	719	0	0	100	719	0	0	0	0
206/1:Timber Column	each	18	0	0	83	15	17	3	0	0
1150/1:Check/Shake	each	15	0	0	100	15	0	0	0	0
1160/1:Crack (Timber)	each	3	0	0	0	0	100	3	0	0
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
235/1:Timber Pier Cap	ft	72	0	0	100	72	0	0	0	0
1150/1:Check/Shake	ft	72	0	0	100	72	0	0	0	0
332/1:Timb Bridge Railing	ft	59	0	0	100	59	0	0	0	0
1150/1:Check/Shake	ft	59	0	0	100	59	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1150/1:Check/Shake	each	4	0	0	100	4	0	0	0	0

Remarks: NBI Remarks: Structure located in middle of short, sharp "s" curve. North end of sway bracing is split. First girder both spans, south side cracked diagonally around railing post bolts. Moderate channel erosion due to poor channel alignment. Center decaying in north piling in east abutment. Span 1, girder 11 has several longitudinal cracks where it bears on abutment one. NE end marker missing.

Alert Code 1: East abutment tipped back 4-6". West abutment cap tipping back. This stress is starting to split tops of abutment piling. Piling 5 in west abutment split 3'.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-158-28.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Major Collector
04 City	WELLINGTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00528 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST OF WILLOW CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	6.999	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 36' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 14' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	408090.3 5384078.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	130 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.5 Ft.	Underwater	N
48 Length of Max Span	19 Ft.	Other Special	N
49 Structure Length	91.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	08/15/2018
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRC-0528(055)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
QUAD 14 X 9 X 126' PCRCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-158-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	1,841	0	0	100	1,841	0	0	0	0
510/1:Wearing Surfaces	sq.ft	1,841	100	1,841	0	0	0	0	0	0
206/1:Timber Column	each	34	0	0	100	34	0	0	0	0
1150/1:Check/Shake	each	34	0	0	100	34	0	0	0	0
216/1:Timber Abutment	ft	69	0	0	100	69	0	0	0	0
1150/1:Check/Shake	ft	69	0	0	100	69	0	0	0	0
235/1:Timber Pier Cap	ft	102	0	0	100	102	0	0	0	0
1150/1:Check/Shake	ft	102	0	0	100	102	0	0	0	0
332/1:Timb Bridge Railing	ft	121	0	0	100	121	0	0	0	0
1150/1:Check/Shake	ft	121	0	0	100	121	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10/10/2018 - Bridge replaced with a Quad 14 x 9 RCB

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-159-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	61.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	WELLINGTON TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	4 E 1 S OF WILLOW CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 35' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 12' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	410691.7 5383234.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 13 24 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 9 17 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1947 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	35 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 10, 2018
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	Y 48 06/16/2015
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	12/21/2017
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-159-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	581	100	581	0	0	0	0	0	0
111/1:Timber Open Girder	ft	390	0	0	89	346	11	44	0	0
1150/1:Check/Shake	ft	346	0	0	100	346	0	0	0	0
1170/1:Split/Delamination (Timber)	ft	44	0	0	0	0	100	44	0	0
206/1:Timber Column	each	12	0	0	100	12	0	0	0	0
1150/1:Check/Shake	each	12	0	0	100	12	0	0	0	0
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
235/1:Timber Pier Cap	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
332/1:Timb Bridge Railing	ft	49	0	0	0	0	0	0	100	49
7000/1:Damage	ft	49	0	0	0	0	0	0	196	49
8401/1:Wings	each	4	50	2	50	2	0	0	0	0

Remarks: NBI Remarks: Girders 6,11 & 12 have longitudinal cracks. Fourteenth girder is cracked diagonally, nearly full height. Tops of both east wingwalls have moderate snow plow damage. West piling in north abutment has vertical crack. 10/10/2018 - East railing missing, West rail broke away from posts.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-159-29.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	WELLINGTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4E 1S OF WILLOW CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 35' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 12' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	410687.4 5383036.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 55 99 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 36 65 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1948 106 Yr Reconstructed	1990	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT	2018	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	25 Ft.	Other Special	N
49 Structure Length	27.89 Ft.	218 Channel Profile	Y 48 06/16/2015
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	26.2 Ft.	212 Structure Load Rated	12/21/2017
52 Deck Width	28.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-159-29.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	174	94	164	0	0	6	10	0	0
1080/1:Delamination/Spall/Patched Area	ft	10	0	0	0	0	100	10	0	0
206/1:Timber Column	each	24	0	0	100	24	0	0	0	0
1150/1:Check/Shake	each	24	0	0	100	24	0	0	0	0
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
235/1:Timber Pier Cap	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
330/1:Metal Bridge Railing	ft	56	100	56	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
331/1:Re Conc Bridge Railing	ft	56	100	56	0	0	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1900/1:Distortion	each	4	0	0	100	4	0	0	0	0

Remarks: Element 30 - Paint system failure. NBI Remarks: Bridge was reconstructed 11/90. Additional piling driven in both abutments. Dead man anchors installed. Horizontal brace, for north abutment, is cracked. Wings are slightly twisted. A few small spalls on under side of new quad T-beam deck. End markers are broke off. NW, NE, & SE corners of deck exposed due to varmit burrow.

Alert Code 2: 10/10/2018 - Void from runoff at NE & SE deck corners where wings attach.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-160-19.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	51.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	LORDSBURG TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 2 WEST OF OVERLY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 44' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 11' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	412790.7 5398493.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 14 26 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 10 19 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	201 Gravel/Dirt	209 Posted in "Tons"	13 Tons
Age and Service		Appraisal	
27 Yr Built	1930 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 1 1 1
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 10, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.3 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	Y 48 06/22/2015
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	12/21/2017
51 Bridge Rdwy Width - Curb to Curb	22.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-160-19.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	560	0	0	100	560	0	0	0	0
111/1:Timber Open Girder	ft	436	0	0	98	426	2	10	0	0
206/1:Timber Column	each	10	0	0	90	9	10	1	0	0
1150/1:Check/Shake	each	9	0	0	100	9	0	0	0	0
1170/1:Split/Delamination (Timber)	each	1	0	0	0	0	100	1	0	0
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
4000/1:Settlement	ft	49	0	0	100	49	0	0	0	0
235/1:Timber Pier Cap	ft	49	0	0	100	49	0	0	0	0
332/1:Timb Bridge Railing	ft	49	0	0	76	37	25	12	0	0
1150/1:Check/Shake	ft	37	0	0	76	37	0	0	0	0
1170/1:Split/Delamination (Timber)	ft	12	0	0	0	0	100	12	0	0
4000/1:Settlement	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	25	1	75	3	0	0	0	0
1140/1:Decay/Section Loss	each	3	0	0	150	3	0	0	0	0

Remarks: NBI Remarks: Damaged girders repaired with an adjacent girder. Timber diaphragms installed between girders at both abutments. Girder ends in SW corner do not bear firmly on abutment cap but remain wedged against backwall planks. A shim (1" board) was placed under one of girders. Remainder of girders rest firmly on cap. Short, vertical splits in top two to three feet of several of piling. Outer ends of north wingwalls heaving upward. Top horizontal braces in NE and NW wings are split. Girder 4 & 17 have longitudinal crack and girder 6 has diagonal and longitudinal cracks developing. Centers decaying in NW & NE wing wall piling. SW corner deck plank missing (2'x1') allowing dirt to collect on cap. SE corner of deck plank is separated allowing dirt to collect on cap. Abutment 1, cap is twisted. 4th pile in East abutment split and repaired with metal brackets. 01/20/2015 - West abutment rotating forward on south half. Gap in planks at mid-point in west abutment. 10/10/2018 - North bridge rail is split from NE corner to middle of bridge. Load limit signs in poor condition.

Alert Code 1: 10-10-2018 - 1 x 1 sink holes in NW corner of deck and center of roadway on East edge of deck.

Alert Code 2: Abutment 2 cap not bearing piling 1 & 4 (1-2" gap).

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-160-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	39.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	LORDSBURG TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK BED	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 2 WEST OF OVERLY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 43' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 11' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	412910.5 5396884.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 8 14 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 5 10 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	09 Tons
Age and Service		Appraisal	
27 Yr Built	1932 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 10, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	16 Ft.	218 Channel Profile	Y 48 06/22/2015
49 Structure Length	34.12 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	12/21/2017
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-160-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	786	0	0	100	786	0	0	0	0
1150/1:Check/Shake	sq.ft	786	0	0	100	786	0	0	0	0
111/1:Timber Open Girder	ft	817	0	0	98	800	2	17	0	0
1150/1:Check/Shake	ft	800	0	0	100	800	0	0	0	0
1160/1:Crack (Timber)	ft	17	0	0	0	0	100	17	0	0
206/1:Timber Column	each	18	0	0	94	17	6	1	0	0
1140/1:Decay/Section Loss	each	1	0	0	0	0	100	1	0	0
1150/1:Check/Shake	each	17	0	0	100	17	0	0	0	0
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
235/1:Timber Pier Cap	ft	72	0	0	100	72	0	0	0	0
1150/1:Check/Shake	ft	72	0	0	100	72	0	0	0	0
332/1:Timb Bridge Railing	ft	69	0	0	78	54	0	0	22	15
1150/1:Check/Shake	ft	54	0	0	100	54	0	0	0	0
7000/1:Damage	ft	15	0	0	0	0	0	0	100	15
4000/1:Settlement	each	1	100	1	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1150/1:Check/Shake	each	4	0	0	100	4	0	0	0	0

Remarks: NBI Remarks: Large spacing between deck planks has let large deposit of dirt and gravel collect on west abutment cap. Plank, across west end of girders, has slipped down and approach embankment also sifting onto west cap. Girders extremely weathered approach embankments moderately eroded due to poor channel alignment to north of bridge. Large washout by NW wing. Span 1 girder 7, 8, 12, & 24 cracked diagonally. Span two, girders 5, 13 & 16 cracked. Several piling with vertical weather checks. Several longitudinal weather checks in pier cap and west abutment cap. Both abutment caps have minor to moderate rotation and bear on back edges of piling. Horizontal crack adjacent to knot in girder 12 in span one. No end markers. Timber curbs decayed. 1-19-17 E. half of S. rail down. N. rail all collapsing. 10/10/2018 - Load limit signs in poor condition.

Alert Code 1: Gaps, between shifting abutment back planks, is allowing some erosion of embankments. North pile in pier has severe interior decay. West abutment cap bearing on piles 1, 2, & 4 only.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-160-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	CECIL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK BED	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 2 NORTH OF OVERLY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 42' 17.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 12' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	411597.5 5395317.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 28 50 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 30 Tons
208 Dk Overburden	203 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1932 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	55 30 Year of ADT 2018	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	19 Ft.	90 Date of Last Inspection	October 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.3 Ft.	Underwater	N
48 Length of Max Span	34 Ft.	Other Special	N
49 Structure Length	37.07 Ft.	218 Channel Profile	Y 48 06/22/2015
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/21/2017
	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-160-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	272	96	262	4	10	0	0	0	0
1090/1:Exposed Rebar	ft	10	0	0	100	10	0	0	0	0
206/1:Timber Column	each	12	0	0	100	12	0	0	0	0
1150/1:Check/Shake	each	12	0	0	100	12	0	0	0	0
216/1:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
1150/1:Check/Shake	ft	52	0	0	100	52	0	0	0	0
235/1:Timber Pier Cap	ft	52	0	0	100	52	0	0	0	0
1150/1:Check/Shake	ft	52	0	0	100	52	0	0	0	0
331/1:Re Conc Bridge Railing	ft	75	97	73	3	2	0	0	0	0
1090/1:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: End of curb chipped in NE corner with exposed rebar. No bridge rails. Small spalls developing along bottom of beams. Rebar too close to the surface. Short vertical cracks in some of abutment piling. Horizontal weather checking in west abutment cap. No end markers. Soffit plank, over SW & SE wing piling, is cracked in two. NE soffit pulled away from top of wing wall. 10/10/2018 - Small spall around lift points on top of girders.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-160-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	42.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	CECIL TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5E 2N OF WILLOW CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 37' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 11' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	412365.8 5387354.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 10 18 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 7 13 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1939 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 10, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.6 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	Y 48 06/22/2015
49 Structure Length	70.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	12/21/2017
51 Bridge Rdwy Width - Curb to Curb	22.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-160-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,615	0	0	100	1,615	0	0	0	0
1150/1:Check/Shake	sq.ft	1,615	0	0	100	1,615	0	0	0	0
111/1:Timber Open Girder	ft	922	0	0	97	897	3	25	0	0
1150/1:Check/Shake	ft	897	0	0	100	897	0	0	0	0
1160/1:Crack (Timber)	ft	25	0	0	0	0	100	25	0	0
206/1:Timber Column	each	24	0	0	63	15	38	9	0	0
1150/1:Check/Shake	each	15	0	0	100	15	0	0	0	0
1160/1:Crack (Timber)	each	9	0	0	0	0	100	9	0	0
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
235/1:Timber Pier Cap	ft	95	0	0	76	72	24	23	0	0
1150/1:Check/Shake	ft	72	0	0	85	72	0	0	0	0
4000/1:Settlement	ft	23	0	0	0	0	100	23	0	0
332/1:Timb Bridge Railing	ft	141	0	0	100	141	0	0	0	0
1150/1:Check/Shake	ft	141	0	0	100	141	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	50	2	50	2	0	0	0	0
1900/1:Distortion	each	2	0	0	100	2	0	0	0	0

Remarks: NBI Remarks: Some channel scour through spans two and three. Outer corners of north abutment exposed as back planks at these locations shorter than the rest. Sway braces on pier 2 are cracked. Longitudinal crack in south abutment cap. Both abutments leaning back 4-6". Caps are bearing on back half of abutment piling. Vertical splits are starting at top of some piling. Girders 3, 9, and 10 span one and 5, 9, and 10 span two are cracked longitudinally. Bottom horizontal brace broke back of west piling in south abutment. Minor to moderate void behind abutment 4 in SW & SE corners. Abutment 1 horizontal brace cracked. Pier 3 sway brace is broke. No end markers. South end deck plank damaged.

Alert Code 1: There are short to medium length splits in following listed piling (from west) abut. one 1, 2, 4, 5; pier two 2, 5, 7 pier three 7 and abut. four # 1.

Alert Code 2: 10/10/2018 - Abutment 4 cap rotated back 6" bearing only on back edges of piling.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-161-23.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Major Collector
04 City	CECIL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00522 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK BED	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST OF OVERLY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.099	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 40' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 11' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	412444.5 5392074.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 29 52 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 31 Tons
208 Dk Overburden	302 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1964 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	215 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	3 SC - Unstable
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	33.14 Ft.	218 Channel Profile	Y 48 06/22/2015
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/28/2017
	27.6 Ft.	213 Federal Aid Project Number	CS-454(16)
52 Deck Width	28.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-161-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	904	100	904	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	904	100	904	0	0	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	262	89	232	12	30	0	0	0	0
1090/1:Exposed Rebar	ft	30	0	0	177	30	0	0	0	0
206/1:Timber Column	each	14	0	0	100	14	0	0	0	0
1150/1:Check/Shake	each	14	0	0	100	14	0	0	0	0
216/1:Timber Abutment	ft	59	0	0	100	59	0	0	0	0
1150/1:Check/Shake	ft	59	0	0	100	59	0	0	0	0
235/1:Timber Pier Cap	ft	59	0	0	100	59	0	0	0	0
1150/1:Check/Shake	ft	59	0	0	100	59	0	0	0	0
331/1:Re Conc Bridge Railing	ft	66	100	66	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	66	0	0	96	63	5	3	0	0
1150/1:Check/Shake	ft	63	0	0	100	63	0	0	0	0
1170/1:Split/Delamination (Timber)	ft	3	0	0	0	0	100	3	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: End markers are up. Approaches are slightly rough due to embankment settlement. Washout by outer end of NE wing wall minor shifting of west abutment back planks. Both abutment caps are weather checked. Small spalls developing along bottoms of concrete channel beams. Small areas of reinforcing exposed. 3' of bridge rail split in NE corner.

Alert Code 1: 1' x 1' x 3' ' sink hole in south west corner at edge of pavement exposing back of abutment.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-161-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	52.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	CECIL TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 2 SOUTH OF OVERLY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 38' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 10' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	413696.7 5388838.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 15 28 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 11 21 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	12 Tons
Age and Service		Appraisal	
27 Yr Built	1947 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	15 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 13, 2019
32 Approach Roadway Width	17 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	21 Ft.	218 Channel Profile	0 0 07/31/2012
49 Structure Length	25.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	12/21/2017
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-161-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	603	80	480	20	123	0	0	0	0
1150/1:Check/Shake	sq.ft	123	0	0	100	123	0	0	0	0
Notes:Weathered planks. All others replaced Sept. 2019. - 11/13/2019										
111/1:Timber Open Girder	ft	550	0	0	96	525	5	25	0	0
1150/1:Check/Shake	ft	525	0	0	100	525	0	0	0	0
1160/1:Crack (Timber)	ft	25	0	0	0	0	100	25	0	0
Notes:Cracked girder in South wheel track, reinforced with additional girders. - 11/13/2019										
206/1:Timber Column	each	10	0	0	100	10	0	0	0	0
1150/1:Check/Shake	each	10	0	0	100	10	0	0	0	0
Notes:Weathered timber - 11/13/2019										
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
Notes:Weathered timber - 11/13/2019										
235/1:Timber Pier Cap	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
Notes:East cap replaced Sept. 2019 with used timber. - 11/13/2019										
332/1:Timb Bridge Railing	ft	52	100	52	0	0	0	0	0	0
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Channel scour under bridge; hole 4.5 feet lower than through channel. - 11/13/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1140/1:Decay/Section Loss	each	4	0	0	100	4	0	0	0	0

Remarks: . - 11/13/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-161-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	51.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	CECIL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 3 SOUTH OF OVERLY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 38' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 10' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	413990.7 5388413.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 9 17 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 6 12 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	204 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1932 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	45 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 10, 2018
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	0 0 07/31/2012
49 Structure Length	68.00 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	12/21/2017
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-161-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,109	100	1,109	0	0	0	0	0	0
111/1:Timber Open Girder	ft	781	0	0	100	781	0	0	0	0
1150/1:Check/Shake	ft	781	0	0	100	781	0	0	0	0
206/1:Timber Column	each	15	0	0	100	15	0	0	0	0
1150/1:Check/Shake	each	15	0	0	100	15	0	0	0	0
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
235/1:Timber Pier Cap	ft	72	0	0	100	72	0	0	0	0
1150/1:Check/Shake	ft	72	0	0	100	72	0	0	0	0
332/1:Timb Bridge Railing	ft	95	0	0	87	83	0	0	13	12
1150/1:Check/Shake	ft	83	0	0	100	83	0	0	0	0
7000/1:Damage	ft	12	0	0	0	0	0	0	27	12
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1900/1:Distortion	each	1	0	0	100	1	0	0	0	0

Remarks: Girders doubled in span 1 - 5, 7, 11 & 13 span 2 - 6, 8, 11 & 13, all from the South. South abutment bowed inward at both ends. SE WING MODERATELY TWISTED. LARGE RIP RAP HAS BEEN PLACED BY ALL WING WALLS AND BOTH ABUTMENTS. SWAY BRACE ON PIER IS CRACKED. E CURB PUSHED OUTWARD TOWARD S END. CRACKED DIAGONALLY IN SPAN 1 GIRDER 10, SPAN 2 GIRDER 12. S ABUT TOP HORIZONTAL BRACE CRACKED DIAGONALLY. NO END MARKERS. 12/09/2016 SI&A sheet shows 3 span, it is a 2 span 46' length

Alert Code 1: East end of pier 2 has settled 3".

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-161-26.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	58.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	CECIL TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1W 3S OF OVERLY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 37' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 10' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	413974.5 5387230.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 10 18 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 6 12 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	208 Gravel/Dirt	209 Posted in "Tons"	11 Tons
Age and Service		Appraisal	
27 Yr Built	1938	67 Structural Condition	3 Intolerable - Correct
106 Yr Reconstructed	-1	68 Deck Geometry	5 Above Tolerable
42 Type of Service	1 Highway - On	69 Underclear. Vert & Horiz	N Not applicable (NBI)
	5 Waterway - Under	71 Waterway Adequacy	6 Equal Minimum
28 Lanes on Structure	2	72 App. Rdwy. Alignment	7 Above Min Criteria
29 ADT	45	36 Traffic Safety Features	0 0 0 0
30 Year of ADT	2018	113 Scour Critical	U Unknown Scour
109 Average Daily Truck Traffic	-1.00		
19 Bypass, Detour Length	2 Miles		
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 10, 2018
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 06/20/2017
49 Structure Length	46.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	12/21/2017
51 Bridge Rdwy Width - Curb to Curb	23.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-161-26.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,561	0	0	100	1,561	0	0	0	0
1150/1:Check/Shake	sq.ft	1,561	0	0	100	1,561	0	0	0	0
111/1:Timber Open Girder	ft	883	0	0	100	883	0	0	0	0
1150/1:Check/Shake	ft	833	0	0	94	833	0	0	0	0
206/1:Timber Column	each	20	0	0	90	18	10	2	0	0
1150/1:Check/Shake	each	18	0	0	100	18	0	0	0	0
1160/1:Crack (Timber)	each	2	0	0	0	0	100	2	0	0
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
235/1:Timber Pier Cap	ft	95	0	0	100	95	0	0	0	0
1150/1:Check/Shake	ft	95	0	0	100	95	0	0	0	0
332/1:Timb Bridge Railing	ft	135	0	0	78	105	0	0	22	30
1150/1:Check/Shake	ft	105	0	0	78	105	0	0	0	0
7000/1:Damage	ft	30	0	0	0	0	0	0	100	30
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	0	0	50	2	50	2	0	0
1140/1:Decay/Section Loss	each	2	0	0	100	2	0	0	0	0
1900/1:Distortion	each	2	0	0	0	0	100	2	0	0

Remarks: NBI Remarks: In span 1 girders 6, 8, 11, 13 are doubled. In span 2 girders 5, 7, 11 and 13 are doubled. Large rip rap has been placed along all wings and both abutments. Intersecting road ditch has left large silt deposit at NE corner of bridge. Tops of NE and SE wings moderately damaged by snow plow. 1st and 2nd piling (from east) south abutment has two long deep weather checks. Several other pile have deep weather checks. Long horizontal cracks on underside of both pier caps; triggered when caps were spiked to piling. First section of bridge rail tore loose in NE corner. No end markers. Girders 1, 2 & 12 span 2 and girder 13 in span 3 have longitudinal or diagonal cracks. Span 1, girder 1 cracked. 5th pile from east, south abutment, outside half not bearing on cap.

Alert Code 1: SE wing severely twisted and beginning to break up.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-162-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	46.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	CECIL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH 1 WEST OF OVERLY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 39' 40.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 09' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	414974.5 5390428.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 8 14 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 5 9 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	207 Gravel/Dirt	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1939 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 10, 2018
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.6 Ft.	Other Special	N
48 Length of Max Span	21 Ft.	218 Channel Profile	Y 48 07/06/2015
49 Structure Length	45.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	12/21/2017
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-162-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,055	0	0	100	1,055	0	0	0	0
1150/1:Check/Shake	sq.ft	1,055	0	0	100	1,055	0	0	0	0
111/1:Timber Open Girder	ft	597	0	0	93	557	7	40	0	0
1150/1:Check/Shake	ft	557	0	0	97	557	0	0	0	0
1160/1:Crack (Timber)	ft	40	0	0	0	0	200	40	0	0
206/1:Timber Column	each	15	0	0	100	15	0	0	0	0
1150/1:Check/Shake	each	15	0	0	100	15	0	0	0	0
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
235/1:Timber Pier Cap	ft	72	0	0	100	72	0	0	0	0
1150/1:Check/Shake	ft	72	0	0	100	72	0	0	0	0
332/1:Timb Bridge Railing	ft	92	0	0	78	72	0	0	22	20
1150/1:Check/Shake	ft	72	0	0	100	72	0	0	0	0
7000/1:Damage	ft	20	0	0	0	0	0	0	100	20
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	0	0	50	2	50	2	0	0
1140/1:Decay/Section Loss	each	2	0	0	0	0	100	2	0	0
1900/1:Distortion	each	2	0	0	100	2	0	0	0	0

Remarks: NBI Remarks: East sway brace on pier is broken. Top of NE wing severely damaged. NW wing is twisting. Tops of wingwalls have minor to moderate snow plow damage. Heavy silt deposit in span two. Bridge rail tore loose from deck in SE corner. West sway brace on pier missing bottom 1/3. 11/2010 - W ABUT HORIZONTAL BRACES CRACKED. CENTERS OF WING PILING DECAYING. NW & SW BRIDGE RAIL HAVE DIAGONAL CRACKS WITH TOP PART MISSING. NO END MARKERS.

Alert Code 1: 3' x 3' sinkhole in SW corner.

Alert Code 2: Girder 9, span one and 5, 6, and 8, span two (from north) have longitudinal cracks 4 to 8 feet long.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-162-24.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	83.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	CECIL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MUD CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF OVERLY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 39' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 08' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	415643.5 5390583.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 29 53 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
208 Dk Overburden	202 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1978 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	65 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	October 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	32.15 Ft.	218 Channel Profile	Y 48 06/22/2015
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	212 Structure Load Rated	06/28/2017
52 Deck Width	28.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-162-24.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	262	100	262	0	0	0	0	0	0
206/1:Timber Column	each	14	0	0	100	14	0	0	0	0
1150/1:Check/Shake	each	14	0	0	100	14	0	0	0	0
216/1:Timber Abutment	ft	66	0	0	100	66	0	0	0	0
1150/1:Check/Shake	ft	66	0	0	100	66	0	0	0	0
235/1:Timber Pier Cap	ft	66	0	0	76	50	24	16	0	0
1140/1:Decay/Section Loss	ft	16	0	0	0	0	160	16	0	0
1150/1:Check/Shake	ft	50	0	0	89	50	0	0	0	0
331/1:Re Conc Bridge Railing	ft	66	100	66	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1150/1:Check/Shake	each	4	0	0	100	4	0	0	0	0

Remarks: NBI Remarks: No bridge rails. Bridge has precast curbs. End markers are missing. Both abutments are riprapped. Channel scour mid span and to west of bridge, 2-4 feet deep. 11/2010 - S ABUT 5TH PLANK DOWN CRACKED MID SPAN. BOTH ABUT CAPS WEATHER CHECKED EAST END.

Alert Code 1: East 10' of North abutment cap beginning to crush.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-162-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	49.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	CECIL TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 1 WEST OF OVERLY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 38' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 09' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	414462.3 5388837.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 14 26 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 10 19 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	25 Tons
Age and Service		Appraisal	
27 Yr Built	1930 106 Yr Reconstructed	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 10, 2018
32 Approach Roadway Width	17 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	13 Ft.	218 Channel Profile	Y 48 06/22/2015
49 Structure Length	28.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	03/27/2018
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 05-162-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	667	0	0	100	667	0	0	0	0
1150/1:Check/Shake	sq.ft	667	0	0	100	667	0	0	0	0
111/1:Timber Open Girder	ft	696	0	0	97	676	3	20	0	0
1150/1:Check/Shake	ft	676	0	0	100	676	0	0	0	0
1160/1:Crack (Timber)	ft	20	0	0	0	0	100	20	0	0
206/1:Timber Column	each	18	0	0	100	18	0	0	0	0
1150/1:Check/Shake	each	18	0	0	100	18	0	0	0	0
216/1:Timber Abutment	ft	49	0	0	51	25	49	24	0	0
1150/1:Check/Shake	ft	25	0	0	100	25	0	0	0	0
4000/1:Settlement	ft	24	0	0	0	0	100	24	0	0
235/1:Timber Pier Cap	ft	72	0	0	100	72	0	0	0	0
1150/1:Check/Shake	ft	72	0	0	100	72	0	0	0	0
332/1:Timb Bridge Railing	ft	59	0	0	0	0	100	59	0	0
1140/1:Decay/Section Loss	ft	59	0	0	0	0	100	59	0	0
4000/1:Settlement	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	0	0	75	3	25	1	0	0
1900/1:Distortion	each	1	0	0	0	0	100	1	0	0
4000/1:Settlement	each	3	0	0	100	3	0	0	0	0

Remarks: Top brace on west abutment cracked towards south end. Abutment back planks are shifting inward DUE TO LACK OF HORIZONTAL BRACE NW WING MODERATELY TWISTED. E ABUT CAP HAS DEEP WATER CHECKS AS DUE PIER PILING. SEVERE VOID PROBED BACK OF WEST ABUT. GIRDERS 6, 7, 15 & 17 (FROM N) SPAN 1 & GIRDERS 3, 14, 15, 16 & 22 SPAN 2 HAVE MODERATE CRACKS. NO END MARKERS. NW WING IS BREAKING UP. 1ST 6 GIRDERS IN SW CORNER DO NOT BEAR ON CAP BUT WEDGED AGAINST ABUT BACK PLANK. All railing broke and decayed. 10/2018 - Load limit signs missing. Posted 4/17/19 per LG nmh - photo

Alert Code 1: N END OF PIER HEAVED UPWARD APPROX 4". NE WING TOP OF PLANK BROKE OUTSIDE 1/2. 3' OF DECK EXPOSED IN NE CORNER. SWAY BRACE ON PIER CRACKED. BOTTOM HORIZONTAL BRACE FOR ABUT PLANKS MISSING ON BOTH ABUTMENTS.

Alert Code 2: Large voids back of east abutment. 2 broken vertical plank.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-162-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Bottineau	26 Functional	Rural, Local
04 City	WELLINGTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST OF WILLOW CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 35' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 08' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	415530.0 5383565.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2004 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X11X62' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 05-162-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	124	100	124	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: 0.800mm diagonal cracks, in west outer walls, extend from bottom of parapet inward toward precast joint. End marker down in NE corner.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-103-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CORRAL CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 2 SOUTH MARMARTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 16' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 59' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	115373.5 5135928.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	4 Protection Undermined
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 43 78 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 23 41 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1984 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	49 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	Y 48 07/13/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/21/2017
	27.6 Ft.	213 Federal Aid Project Number	BRO-6(6)SITE 2
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Abdelmokarm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 06-103-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	351	100	351	0	0	0	0	0	0
202/3:Steel Column	each	10	40	4	50	5	10	1	0	0
1000/3:Corrosion	each	6	0	0	83	5	17	1	0	0
Notes:Steel Columns start showing some section loss - 10/7/2019										
515/3:Steel Protective Coating	sq.ft	100	50	50	40	40	10	10	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	50	0	0	80	40	20	10	0	0
Notes:Section loss south pier cap & columns - 10/7/2019										
217/1:Masonry Abutment	ft	56	100	56	0	0	0	0	0	0
231/1:Steel Pier Cap	ft	56	54	30	11	6	36	20	0	0
1000/1:Corrosion	ft	26	0	0	23	6	77	20	0	0
Notes:Corrosion at both end and section loss mostly on south pier cap - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	100	30	30	50	50	20	20	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	70	0	0	71	50	29	20	0	0
Notes:Peeling Paint, section loss south pier cap and columns - 10/7/2019										
330/1:Metal Bridge Railing	ft	98	54	53	46	45	0	0	0	0
1000/1:Corrosion	ft	45	0	0	100	45	0	0	0	0
Notes:Peeling paint typical on bridge railing. - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	100	55	55	45	45	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	45	0	0	100	45	0	0	0	0
Notes:Peeling paint typical on bridge railing. - 10/7/2019										
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Steel cap on each end beginning to show some corrosion. - 10/7/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-104-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 2 SOUTH MARMARTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 16' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 58' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	116570.3 5136486.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2012 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	98 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 20, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	51.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/14/2014
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	N11-839
53 Min Vert Clear. Over Bridge	99 Ft. 11 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	0.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD 12 X 12 X 80' PCRCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-104-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	320	100	320	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
6000/3:Scour	each	1	0	0	100	1	0	0	0	0

Remarks: 11/01/2013 - S.E. Barrel blocked by sandbar. 11-9-2015-S.E. BARREL IS NO LONGER BLOCKED BY A SANDBAR. 10/20/17 - SW riprap/slope protection starting to show signs of scour. 2nd barrel from South on West side partially silted in.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-104-21.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00605 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TRIB LITTLE MISSOURI	102 Direction of Traffic	2 2-way traffic
09 Location	23 SOUTH 2 WEST MARMARTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.200	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 58' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 58' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	114082.8 5103342.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 32 57 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1970 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	90 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	21.0 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 11/23/2016
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/28/2017
	21.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Abdelmokarm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 06-104-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	217	100	217	0	0	0	0	0	0
206/1:Timber Column	each	18	72	13	22	4	6	1	0	0
1160/1:Crack (Timber)	each	1	0	0	0	0	100	1	0	0
Notes:North side 2nd column from west cracked - 10/7/2019										
1900/1:Distortion	each	4	0	0	100	4	0	0	0	0
Notes:One column north, three south bowing into stream. - 10/7/2019										
216/1:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
8401/1:Wings	each	4	50	2	50	2	0	0	0	0
6000/1:Scour	each	2	0	0	100	2	0	0	0	0
Notes:Scour around N.W. & S.E. wings. - 10/7/2019										

Remarks: NBI Remarks: Posted narrow bridge. Delinators on approach roadway. Erosion around back side of the wing walls. Size of scour 2' deep, 4' wide, 8' long 11-1-2013 Attempt made to fix erosion behind wings with riprap, NW & SE wings beginning to erode again slightly. 10/20/17 - 2 columns North, 3 South bowing into stream. 1 column North cracking at waterline. 10.7.19- One north and 3 south columns bowing into stream. - 10/7/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-105-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00605 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BIG BUMBO CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	15 SOUTH OF MARMARTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	11.897	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 06' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 57' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	117222.7 5117333.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1999 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	90 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 20, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRC-605(52) SITE 1
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14X10X98'PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-105-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	197	95	187	5	10	0	0	0	0
6000/3:Scour	ft	10	0	0	100	10	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0

Remarks: NBI Remarks: Scouring around all wingwalls, exposing top of box & joint fabric. 11-1-2013 NW corner of wing wall is settled slightly. 11-9-2015 1' OF SEDIMENT THRU ENTIRE BOX. 10/20/17 - Minor staining @ joints in both barrels. **Shows on county map 1 mile North of where it's actually located at**

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-105-16.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00605 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MISSOURI RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	19 SOUTH 1 WEST MARMARTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 02' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 57' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	116767.2 5111288.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2008 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	90 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	25 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 20, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	44.95 Ft.	218 Channel Profile	– -1 01/01/1901
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	-1
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD 10' X 4' X 62' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-105-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	248	100	248	0	0	0	0	0	0
Notes: _										
8399/1:Slope Protection, RC	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	50	2	0	0	50	2	0	0
2330/1:Seal Damage	each	2	0	0	0	0	100	2	0	0
Notes: _										

Remarks: _ 11-1-2013 Approach conc has settled approx 1" both ends of box.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-105-17.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00605 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TRIB LITTLE MISSOURI R	102 Direction of Traffic	2 2-way traffic
09 Location	19 SOUTH 1 WEST MARMARTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	7.199	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 02' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 57' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	115948.5 5110471.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1999 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	90 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 20, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRC-0605(52) SITE 3
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14X6X66' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-105-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	131	50	66	50	65	0	0	0	0
Notes: _										
4000/3:Settlement	ft	65	0	0	100	65	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
6000/3:Scour	each	4	0	0	100	4	0	0	0	0

Remarks: 10/20/17 - Scour around all 4 wingwalls. Minor settlement.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-105-18.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00605 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TRIB. LITTLE MISSOURI	102 Direction of Traffic	2 2-way traffic
09 Location	20 SOUTH MARMARTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.899	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 01' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 57' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	115768.7 5108259.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2008 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	90 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 20, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.7 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	120.1 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12'X 10'X 120' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-105-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	240	96	230	4	10	0	0	0	0
Notes: _										
4000/3:Settlement	ft	10	0	0	100	10	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NEW BOX IN 2008. 11-9-2015 1' OF SEDIMENT IN SOUTH BARREL OF BOX. 10/20/17 - Minor settlement on last inner/cutoff wall, West end.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-108-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	20 SOUTH 3 EAST MARMARTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 00' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 53' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	121387.9 5107262.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	6 Corrugated Steel	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 40 72 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	25 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1970 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.3 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	1 48 11/23/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	23.6 Ft.	212 Structure Load Rated	06/02/2016
52 Deck Width	24.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Abdelmokarm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 06-108-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
30/1:Steel Deck - Orthotropic	sq.ft	700	100	700	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	700	100	700	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	299	100	299	0	0	0	0	0	0
1000/1:Corrosion	ft	50	100	50	0	0	0	0	0	0
Notes:Beams showing signs of initial corrosion. - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	50	50	50	50	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	50	50	50	50	0	0
Notes:Failing. - 10/7/2019										
202/1:Steel Column	each	22	100	22	0	0	0	0	0	0
1000/1:Corrosion	each	50	100	50	0	0	0	0	0	0
Notes:Showing signs of initial corrosion - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	50	50	50	50	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	50	50	50	50	0	0
Notes:Efflorescence, rust staining on must of the columns - 10/7/2019										
217/1:Masonry Abutment	ft	49	0	0	100	49	0	0	0	0
Notes:Steel abutment? Some holes wearing through at top, rusting at bottom. - 10/7/2019										
1120/1:Efflorescence/Rust Staining	ft	49	0	0	100	49	0	0	0	0
Notes:Back wall very rusty @ bottom & corroded through near top east side of north Abutment. - 10/7/2019										
231/1:Steel Pier Cap	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	59	100	59	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
7363/1:Steel Section Loss	each	4	0	0	100	4	0	0	0	0
Notes:N.W. wing beginning to corrode through, N.E wing corroded through some places. - 10/7/2019										

Remarks: NBI Remarks: Diaphragms added to stringers. Limited sight distance from the north,because of vertical and horizontal curves. Northwest corner beginning to erode away at wing area. Fence in channel on west side of bridge. 10/07/2019 - Back wall very rusty @ bottom and corroded though near top east side of north abutment. - 10/7/2019

Alert Code 1: Rusting on north & south abutments and also on wings. - 10/7/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-109-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	SUNNY SLOPE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MISSOURI RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	10 SOUTH OF MARMATH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 09' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 53' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	122662.4 5123988.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	2 Concrete Precast Panel	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 41 74 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1997 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	3 Intolerable - Correct
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	42.98 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	COUNTY NO. 9610
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Abdelmokarm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD, 10X4X30' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-109-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	121	98	119	2	2	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:N.E. top of barrel N.W. barrel top has spall w/exposed rebar. - 10/7/2019										
1090/3:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:N.E. top of barrel N.W. barrel top has spall w/exposed rebar. - 10/7/2019										
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Scour at north side box - 10/7/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10/20/17 - North cutoff wall showing signs of some minor abrasion/wearing. 10/07/2019 - Scour at north side box.
- 10/7/2019

Alert Code 2: 10/20/17 - NW barrel has a 1' spall with exposed rebar. - 10/7/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-109-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	82.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	17 SOUTH 3 EAST MARMARTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 03' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 53' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	122062.1 5112130.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 28 52 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 31 Tons
208 Dk Overburden	23 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1970 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	16 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	Y 48 07/13/2016
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	212 Structure Load Rated	06/28/2017
52 Deck Width	25.3 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Abdelmokarm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-109-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	249	17	43	0	0	83	206	0	0
1090/1:Exposed Rebar	ft	20	0	0	0	0	100	20	0	0
Notes:Exposed rebar 2nd beam from west. - 10/7/2019										
1130/1:Cracking (RC and Other)	ft	186	0	0	0	0	100	186	0	0
Notes:Bottom girders cracking throughout. - 10/7/2019										
206/1:Timber Column	each	18	100	18	0	0	0	0	0	0
216/1:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
8398/3:Slope Protection	each	1	0	0	0	0	0	0	100	1
1220/3:Deterioration (Other)	each	1	0	0	0	0	0	0	100	1
Notes:slope protection is non existent. - 10/7/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1900/1:Distortion	each	4	0	0	100	4	0	0	0	0
Notes:N.E. wing planking separated, minor distortion on all wings into stream. - 10/7/2019										

Remarks: NBI Remarks: Abutments pushing in slightly from embankment pressure. NE wing planking separated. 10/20/17
 - Cracking/delamination of beams is progressively getting worse. - 10/7/2019

Alert Code 1: Longitudinal cracking & delamination of beams. - 10/7/2019

Alert Code 2: 20' OF EXPOSED REBAR ON THE CONC BEAM. - 10/7/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-111-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SKULL CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	14 SOUTH 6 EAST MARMARTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 06' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 49' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	127105.5 5118081.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2005 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	14 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 01, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X12X122' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-111-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	244	100	244	0	0	0	0	0	0
8401/1:Wings	each	4	50	2	50	2	0	0	0	0
6000/1:Scour	each	2	0	0	100	2	0	0	0	0

Remarks: NBI Remarks: Bridge replaced with double 12x12x122' rcb in 2005. 10-4-2013 Sediment mound built up at end of NW barrel 5'x5'x2' high. 10-4-2013 Log stuck on south side with grass built up. 11/1/17 - Starting to show signs of erosion with scour holes forming around wings on the East side.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-112-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TRIB. LITTLE MISSOURI	102 Direction of Traffic	2 2-way traffic
09 Location	20 SOUTH 6 EAST MARMARTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 00' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 49' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	127019.8 5106840.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 34 62 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 38 Tons
208 Dk Overburden	23 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1970 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	Y 48 07/13/2016
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/28/2017
	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Abdelmokarm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 06-112-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	200	25	50	63	125	13	25	0	0
1090/1:Exposed Rebar	ft	25	0	0	0	0	100	25	0	0
Notes:1st & 2nd Beams From South Have Cracking W/Exposed Rebar. - 10/8/2019										
1130/1:Cracking (RC and Other)	ft	125	0	0	100	125	0	0	0	0
Notes:1st & 2nd Beams From South Have Cracking W/Exposed Rebar. - 10/8/2019										
206/1:Timber Column	each	18	100	18	0	0	0	0	0	0
216/1:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
8398/3:Slope Protection	each	1	0	0	0	0	0	0	100	1
1220/3:Deterioration (Other)	each	1	0	0	0	0	0	0	100	1
Notes:Only S.W Corner Had Some Concrete Chunks Added For Slope Protection - 10/8/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: South end scouring around SE & SW wings. 10/8/2019 - The 1st & 2nd beam from the south have cracking and exposed rebar. S.W. Corner has had some concrete chunks added for slope protection. - 10/8/2019

Alert Code 2: 11-10-2011 EXPOSED REBAR ON FAR BOTH 1ST & 2ND BEAM FROM SOUTH AND 2ND BEAM FROM THE NORTH. - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-114-10.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00615 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 SOUTH 5 WEST RHAME	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	12.697	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 08' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 45' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	132105.9 5121070.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2013 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	165 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	0 0 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 01, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	44.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	12/31/2013
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CS-930(3)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE 14 X 10 X 56' PCRCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-114-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	168	89	150	11	18	0	0	0	0
Notes: _										
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	17	0	0	100	17	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0

Remarks: Replaced bridge in 2013 with a TRIPLE 14'x10'x56' PRECAST BOX. Barrel sections is 56' Inlet and Outlet end sections are 16' each. 11/1/17 - None of the lift holes were patched in, staining on box around all of them. Spalls on SW & North middle wings, possibly from installation that weren't repaired.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-115-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00615 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SKULL CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	11 SOUTH 5 WEST RHAME	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	9.498	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 05' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 45' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	131832.1 5116078.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 29 52 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
208 Dk Overburden	23 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1970 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	165 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	Y 48 07/13/2016
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	212 Structure Load Rated	06/28/2017
52 Deck Width	25.3 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Abdelmokarm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 06-115-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	249	68	169	20	50	12	30	0	0
1080/1:Delamination/Spall/Patched Area	ft	30	0	0	100	30	0	0	0	0
Notes:East outside beam spalling w/rebar, also 2nd beam from west spalling w/rebar - 10/8/2019										
1090/1:Exposed Rebar	ft	30	0	0	0	0	100	30	0	0
Notes:2nd Beam From West Exposed Rebar In 2 Areas North End and South End. - 10/8/2019										
1130/1:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
Notes:Cracking on the girders with some spalling. - 10/8/2019										
206/1:Timber Column	each	18	94	17	0	0	6	1	0	0
1160/1:Crack (Timber)	each	1	0	0	0	0	100	1	0	0
Notes:S.E. wing column spilt and cracked - 10/8/2019										
216/1:Timber Abutment	ft	56	50	28	50	28	0	0	0	0
1900/1:Distortion	ft	28	0	0	100	28	0	0	0	0
Notes:South abutment bowing 1-2". - 10/8/2019										
235/1:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
Notes:South East wing column cracked and spilt. - 10/8/2019										
1170/1:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0

Remarks: NBI Remarks: Southeast wing column cracked. See photo South abutment cap starting to tilt. South abutment bowing inward 1-2" - 10/8/2019

Alert Code 2: 11/14/2011 - Cracking on the girders with some spalling showing reinforcing steel. - 10/8/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-115-16.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00615 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TRIB. LITTLE MISSOURI	102 Direction of Traffic	2 2-way traffic
09 Location	12 SOUTH 5 WEST RHAME	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	6.798	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 03' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 45' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	131546.6 5111573.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 29 52 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
208 Dk Overburden	23 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1970 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	Y 48 07/13/2016
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/28/2017
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Abdelmokarm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-115-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	249	100	249	0	0	0	0	0	0
206/1:Timber Column	each	18	44	8	44	8	11	2	0	0
1900/1:Distortion	each	10	0	0	80	8	20	2	0	0
Notes:Abutment columns distortion. N. Abutment 2nd column from E. and From W. highly distorted. - 10/8/2019										
216/1:Timber Abutment	ft	56	50	28	50	28	0	0	0	0
1900/1:Distortion	ft	28	0	0	100	28	0	0	0	0
Notes:North Abutment distorted. - 10/8/2019										
235/1:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	50	2	50	2	0	0	0	0
6000/1:Scour	each	2	0	0	100	2	0	0	0	0
Notes:Minor erosion started behind east wings. - 10/8/2019										

Remarks: NBI Remarks: Minor erosion started behind SE wing. Some rip rap has been placed at abutments. Timber piles showing signs of embankment pressure, not all of the piling have cable anchors. Piling are bowed out 1 1/2" to 2". Hairline cracking on girders. 11-4-2013 SW wing has rip rap placed to alleviate erosion problem. - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-117-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	ADELAIDE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COYOTE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 3 WEST OF RHAME	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 11' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 43' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	135555.9 5125515.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 52 93 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 31 56 Tons
208 Dk Overburden	218 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	4 Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.3 Ft.	Underwater	N
48 Length of Max Span	20 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	Y 48 07/13/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	212 Structure Load Rated	12/21/2017
52 Deck Width	24.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Abdelmokarm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-117-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	144	100	144	0	0	0	0	0	0
206/1:Timber Column	each	18	100	18	0	0	0	0	0	0
216/1:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	49	100	49	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Paint starting to wear off on railing. - 10/8/2019										
8398/3:Slope Protection	each	1	0	0	0	0	0	0	100	1
Notes:No slope protection exist. - 10/8/2019										
6000/3:Scour	each	1	0	0	0	0	0	0	100	1
Notes:Slope protection is not existent at structure. - 10/8/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/1/17 - Paint starting to wear off on railing. - 10/8/2019**Alert Code 1:** There is 18-24" of gravel through center of bridge w/ 8" to 1' on edges. This seems like quite a load to have before traffic. Also make bridge rail out of spec. - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-119-23.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Major Collector
04 City	LANGBERG TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00619 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NORTH FORK GRAND RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	19 SOUTH OF RHAME	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.500	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 57' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 39' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	138867.2 5099343.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N00 Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2007 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	90 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	24 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 20, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10'X 8'X 84' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-119-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	168	100	168	0	0	0	0	0	0
Notes:_										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10/20/17 - Tree growing behind SW wingwall.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-125-19.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Major Collector
04 City	GRAND RIVER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00623 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TRIBUTARY GRAND RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 12 SOUTH BOWMAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	6.399	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 00' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 32' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	148861.8 5104927.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N00 Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2009 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 02, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	61.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Strand
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 10X10X98' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-125-19.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	124	100	124	0	0	0	0	0	0
Notes:_										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Structure new in 2009. 11-5-2013 South barrel west side silted in 2' high.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-126-22.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Major Collector
04 City	GRAND RIVER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00623 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TRIBUTARY GRAND RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	17 SOUTH OF GRIFFEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.999	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 58' 27.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 32' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	148689.9 5101163.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2013 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	November 02, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	29.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	12/31/2013
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Strand
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 14 X 10 X 64' PCRCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-126-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	128	100	128	0	0	0	0	0	0
Notes:_										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Bridge replaced by DOUBLE 14'x10'x64' PRECAST RCB in 2013. Inlet and Outledt end sections are 18' each.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-127-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	GRAND RIVER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NORTH FORK GRAND RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 13 SOUTH BOWMAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 59' 29.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 29' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	151975.9 5102919.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 45 81 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 46 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1984 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 17, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.9 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	Y 48 07/07/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.2 Ft.	212 Structure Load Rated	12/21/2017
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	BRO-6(5)SITE 1
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Abdelmokarm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-127-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	299	100	299	0	0	0	0	0	0
202/1:Steel Column	each	10	100	10	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	75	75	25	25	0	0	0	0
Notes:Only the top 1/3 of the columns are painted. - 10/17/2019										
3410/1:Chalk(Steel Protect Coatings)	sq.ft	25	0	0	100	25	0	0	0	0
Notes:Painted area is chalky. - 10/17/2019										
219/1:Stl Abutment	ft	56	100	56	0	0	0	0	0	0
Notes:There is some discoloration on the abutment walls. - 10/17/2019										
330/1:Metal Bridge Railing	ft	98	100	98	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	25	25	0	0	75	75	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	75	0	0	0	0	100	75	0	0
Notes:Finish and primer coats peeling - 10/17/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: County has constructed ditch blocks with 18" drainage pipes on the south end of bridge.
Telephone line attached to bridge east side. NW and SW side of abut/bridge ,the corrugated metal backwall tilting away from channel beams leaving a 1/2"-1" gap from bridge to road. - 10/17/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-128-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	STAR TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 5 NORTH BOWMAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 15' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 28' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	155259.5 5133219.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	6 Bituminous	64 Oper. Rating	HS 52 95 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 31 57 Tons
208 Dk Overburden	33 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1960 106 Yr Reconstructed	1991	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	7 Above Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	140 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	13.00	71 Waterway Adequacy	6 Equal Minimum
19 Bypass, Detour Length	6 Miles	72 App. Rdwy. Alignment	6 Equal Min Criteria
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	5 Stable w/in footing
32 Approach Roadway Width	20 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	October 17, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	29.9 Ft.	Fracture Critical	N
48 Length of Max Span	28 Ft.	Underwater	N
49 Structure Length	29.86 Ft.	Other Special	N
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	218 Channel Profile	Y 48 06/27/2016
	1.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	30.2 Ft.	207 Transporter Erector Routes and Sites	-1
52 Deck Width	32.2 Ft.	212 Structure Load Rated	12/21/2017
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	ERS-54(2)
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Brown, Abdelmokarm
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-128-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	904	100	904	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	904	100	904	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	121	100	121	0	0	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	121	100	121	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	70	46	30	20	0	0	0	0
1190/1:Abrasion(PSC/RC)	ft	20	0	0	100	20	0	0	0	0
Notes:The abutment wall at the waterline is abraded and has some segregation. - 10/17/2019										
330/1:Metal Bridge Railing	ft	59	100	59	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3410/1:Chalk(Steel Protect Coatings)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:The surface of the bridge rail is dulling and some has been recoated with white paint. - 10/17/2019										
331/1:Re Conc Bridge Railing	ft	59	100	59	0	0	0	0	0	0
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
1220/3:Deterioration (Other)	each	1	0	0	100	1	0	0	0	0
Notes:There is very little slope protection along the wings and nothing around the front of the abutments. - 10/17/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	each	4	100	4	0	0	0	0	0	0
Notes:Minor cracking on all 4 wings. - 10/17/2019										

Remarks: NBI Remarks: Scaling at bottom of abutments and minor cracking on abutments. 11/15/2011 - Cracking on all wings. - 10/17/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-128-01.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	STAR TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 NORTH 4 WEST BOWMAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 15' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 29' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	154437.5 5133105.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 48 87 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 32 58 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	19 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 17, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	39 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	Y 48 06/27/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/21/2017
	27.2 Ft.	213 Federal Aid Project Number	BRO-6(7)
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Abdelmokarm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 06-128-01.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	322	100	322	0	0	0	0	0	0
202/1:Steel Column	each	10	90	9	10	1	0	0	0	0
1900/1:Distortion	each	1	0	0	100	1	0	0	0	0
Notes:The NW outside column has a small bent area on the flange. - 10/17/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:There is no paint visible on the columns. They maybe weathering steel or just never painted. - 10/17/2019										
219/1:Stl Abutment	ft	56	100	56	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
231/1:Steel Pier Cap	ft	56	100	56	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:The paint is peeling and cracking off of the pier caps. - 10/17/2019										
330/1:Metal Bridge Railing	ft	79	100	79	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:The paint is missing on a lot of the face of the rail. - 10/17/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Columns are starting to rust. NW column flange is bent. - 10/17/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-128-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	BOWMAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST OF BOWMAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 28' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	154284.5 5123439.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1935 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.98 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Abdelmokarm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X6X34' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 06-128-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	69	0	0	78	54	22	15	0	0
1080/2:Delamination/Spall/Patched Area	ft	15	0	0	0	0	100	15	0	0
Notes:Center wall spalling & delamination. - 10/8/2019										
1190/2:Abrasion(PSC/RC)	ft	54	0	0	100	54	0	0	0	0
Notes:Pop outs, spalls and delamination on middle wall (Typ.) - 10/8/2019										
8401/2:Wings	each	4	0	0	75	3	0	0	25	1
1080/2:Delamination/Spall/Patched Area	each	1	0	0	0	0	0	0	100	1
Notes:S.E. Wing Pop outs & spalling. - 10/8/2019										
1190/2:Abrasion(PSC/RC)	each	3	0	0	100	3	0	0	0	0
Notes:Some scaling on wing walls, concrete cracked where wing and parapet are tied. - 10/8/2019										

Remarks: NBI Remarks: Concrete cracked and scaling where wing and parapet are tied together. Also some scaling on wing walls spalling thru out entire box. Both parapets have spalling and delamination. Floor is pitting in both barrels. 11-5-2013 SE wing extremely pitted with 2 large spall areas at top. 11-5-2013 North parapet is delaminating and spalling off at top edge. 11/1/17 - County fixed slopes & erosion into channel. NE corner of box has some erosion working slowly into roadway. - 10/8/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-128-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	LADD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect TRIB. N.FORK GRAND RIVER		102 Direction of Traffic	2 2-way traffic
09 Location	13 SOUTH 4 WEST BOWMAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 59' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 28' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	152811.0 5102564.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2007 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 02, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Strand
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14'X 7'X 55' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-128-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	110	48	53	50	55	2	2	0	0
Notes: _										
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	0	0	100	1	0	0
1090/3:Exposed Rebar	ft	1	0	0	0	0	100	1	0	0
1120/3:Efflorescence/Rust Staining	ft	55	0	0	100	55	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11-10-2015 BEAVER DAM ON NORTH SIDE AT FENCE LINE. 11/2/17 - Staining on bottom half of culvert.

Alert Code 2: 11/2/17 - 1' spall on inner wall, South side exposing rebar.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-129-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	BOWMAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST OF BOWMAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 28' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	154788.4 5123410.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1935 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Abdelmokarm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X6X34' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-129-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	69	65	45	35	24	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	24	0	0	100	24	0	0	0	0
Notes:Spalling on S.E. Wall and N.W. Corner Below Parapet. - 10/8/2019										
1130/2:Cracking (RC and Other)	ft	65	100	65	0	0	0	0	0	0
Notes:Minor cracks on walls and where wings tie to walls. - 10/8/2019										
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
1130/2:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:Some cracks and spalling on wings. - 10/8/2019										

Remarks: NBI Remarks: Minor cracks on walls and where wings tie to walls. 11-9-2015 2 SMALL SPALLS ON SE BARREL AT WATERLINE. - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-129-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	BOWMAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 1 SOUTH OF BOWMAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 09' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 27' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	155254.1 5121775.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 46 82 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 27 50 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed	1997	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT	2019	4 Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	October 17, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	27 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	Y 48 07/05/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/21/2017
	22.0 Ft.	213 Federal Aid Project Number	KALINA
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Abdelmokarm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 06-129-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	696	100	696	0	0	0	0	0	0
206/1:Timber Column	each	10	90	9	0	0	10	1	0	0
1170/1:Split/Delamination (Timber)	each	1	0	0	0	0	100	1	0	0
Notes:The SE column is split from the top more than halfway down. - 10/17/2019										
216/1:Timber Abutment	ft	49	80	39	20	10	0	0	0	0
1020/1:Connection	ft	10	0	0	100	10	0	0	0	0
Notes:The west abutment planks are separating near the bottom. - 10/17/2019										
235/1:Timber Pier Cap	ft	49	80	39	0	0	20	10	0	0
1160/1:Crack (Timber)	ft	10	0	0	0	0	100	10	0	0
Notes:The south end of the east pier cap is cracked along with the column under it. - 10/17/2019										
331/1:Re Conc Bridge Railing	ft	59	100	59	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:There is a hole on the backside of the SW wing wall Next to the abutment. It looks kind od like a post hole that was not filled in. - 10/17/2019										

Remarks: NBI Remarks: West abutment planks are separating on the bottom. 11/10/2011 - Undermining of east abutment fixed with concrete and riprap. 11/1/17 - Scour hole 1 x1 x 5' behind SW wing where it attaches to bridge. - 10/17/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-130-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	LADD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NORTH FORK GRAND RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	14 SOUTH 1 WEST BOWMAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 58' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 25' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	156665.6 5100329.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1996 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT 2017	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 02, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	25.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	13 Ft.	Other Special	N
49 Structure Length	27.89 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-6(12)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Strand
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X10X51' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-130-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
245/3:Pre Concrete Culvert	ft	102	50	51	50	51	0	0	0	0
Notes: _										
1120/3:Efflorescence/Rust Staining	ft	51	0	0	100	51	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-133-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	GEM TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 5 SOUTH BOWMAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 06' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 22' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	162359.4 5115629.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 29 53 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1993 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	66 Ft.	Other Special	N
49 Structure Length	69.88 Ft.	218 Channel Profile	Y 48 07/05/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/04/1996
52 Deck Width	30.2 Ft.	213 Federal Aid Project Number	BRO-6(13)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Abdelmokarm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-133-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,959	100	1,959	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	279	100	279	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	141	100	141	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/06/2017 - Bridge end markers down. 10/30/2019 - Fence Across Channel Both Sides - 10/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-133-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	70.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	LADD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TRIBUTARY GRAND RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 12 SOUTH BOWMAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 00' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 22' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	161689.9 5103362.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	B Posting Recommended
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	7 Aluminum	64 Oper. Rating	HS 19 35 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 11 21 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	28 Tons
Age and Service		Appraisal	
27 Yr Built	1967 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 18, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.4 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	Y 48 06/30/2016
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/02/2016
51 Bridge Rdwy Width - Curb to Curb	17.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	17.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Abdelmokarm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-133-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	527	100	527	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	210	0	0	100	210	0	0	0	0
1000/1:Corrosion	ft	210	0	0	100	210	0	0	0	0
Notes:Areas freckled rust has initiated. - 10/18/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:May be weathering steel No paint showing - 10/18/2019										
202/1:Steel Column	each	8	0	0	100	8	0	0	0	0
1000/1:Corrosion	each	8	0	0	100	8	0	0	0	0
Notes:Corrosion at the waterline on all column - 10/18/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:May be weathering steel No paint showing - 10/18/2019										
219/1:Stl Abutment	ft	36	72	26	28	10	0	0	0	0
1000/1:Corrosion	ft	10	0	0	100	10	0	0	0	0
Notes:North and South Abutment Rusting on Bottom - 10/18/2019										
231/1:Steel Pier Cap	ft	36	0	0	100	36	0	0	0	0
1000/1:Corrosion	ft	36	0	0	100	36	0	0	0	0
Notes:Corrosion of the steel has initiated. - 10/18/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:May be weathering steel No paint showing - 10/18/2019										
330/1:Metal Bridge Railing	ft	59	0	0	0	0	100	59	0	0
1900/1:Distortion	ft	59	0	0	0	0	100	59	0	0
Notes:Distortion of the metal railing mostly the S.W Corner - 10/18/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Very little paint left. - 10/18/2019										
8398/3:Slope Protection	each	1	0	0	0	0	0	0	100	1
1220/3:Deterioration (Other)	each	1	0	0	0	0	0	0	100	1
Notes:Very much gone - 10/18/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: North and South abutment rusting on bottom. 11-5-2013 SW wing has some erosion near far end.
- 10/18/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-135-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	BOYESEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00645 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 SOUTH 3 EAST BOWMAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	7.399	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 05' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 20' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	163977.5 5113254.8	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 31 56 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed	2010	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	7 Above Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	7 Above Min Criteria
29 ADT	20 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	10.00	71 Waterway Adequacy	8 Equal Desirable
19 Bypass, Detour Length	7 Miles	72 App. Rdwy. Alignment	7 Above Min Criteria
Geometric Data		36 Traffic Safety Features	0 1 1 1
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	7 Countermeasures
32 Approach Roadway Width	26 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	October 18, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	29.9 Ft.	Fracture Critical	N
48 Length of Max Span	48 Ft.	Underwater	N
49 Structure Length	49.87 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	218 Channel Profile	Y 48 07/05/2016
	0.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	207 Transporter Erector Routes and Sites	-1
52 Deck Width	32.0 Ft.	212 Structure Load Rated	02/02/2011
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Brown, Abdelmokarm
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
		111 Pier or Abutment Protection	Not Applicable (P)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-135-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	400	100	400	0	0	0	0	0	0
202/1:Steel Column	each	18	100	18	0	0	0	0	0	0
Notes:8 Column on wings - 10/18/2019										
515/1:Steel Protective Coating	sq.ft	100	80	80	0	0	20	20	0	0
3420/1:Peel/Bub/Crack(Stl Protect Cd	sq.ft	20	0	0	0	0	100	20	0	0
Notes:Peeling and loss of pigment mostly by the waterline. - 10/18/2019										
219/1:Stl Abutment	ft	64	84	54	16	10	0	0	0	0
1000/1:Corrosion	ft	10	0	0	100	10	0	0	0	0
Notes:Corrosion midspan both back walls - 10/18/2019										
231/1:Steel Pier Cap	ft	64	100	64	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	98	100	98	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	90	90	0	0	10	10	0	0
3420/1:Peel/Bub/Crack(Stl Protect Cd	sq.ft	10	0	0	0	0	100	10	0	0
Notes:Peeling and loss of pigment. - 10/18/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Bridge beams moved from 06-144-17.0 on new substructure in 2010. - 10/18/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-135-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	74.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	BOYESEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 8 SOUTH BOWMAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 03' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 19' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	165280.5 5110355.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	6 Corrugated Steel	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 22 39 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 11 21 Tons
208 Dk Overburden	25 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	3 Intolerable - Correct
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	October 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.3 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	Y 48 07/05/2016
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	25.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Abdelmokarm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-135-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
30/1:Steel Deck - Orthotropic	sq.ft	1,163	100	1,160	0	3	0	0	0	0
7000/1:Damage	sq.ft	3	0	0	100	3	0	0	0	0
Notes:Hole in deck south end covered with steel plate. - 10/18/2019										
510/1:Wearing Surfaces	sq.ft	1,163	100	1,163	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	97	97	0	0	0	0	3	3
3440/1:Eff (Stl Protect Coat)	sq.ft	3	0	0	0	0	0	0	100	3
Notes:No protective coating - 10/18/2019										
107/1:Steel Opn Girder/Beam	ft	600	83	500	17	100	0	0	0	0
1000/1:Corrosion	ft	100	0	0	100	100	0	0	0	0
Notes:Some rusting on steel girders. - 10/18/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	80	80	20	20	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	80	80	20	20	0	0
Notes:Protective coating very much gone - 10/18/2019										
202/1:Steel Column	each	26	54	14	46	12	0	0	0	0
Notes:14 column on the wings - 10/18/2019										
1000/1:Corrosion	each	12	0	0	100	12	0	0	0	0
Notes:North and south columns are rusting - 10/18/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No coating maybe weathering steel - 10/18/2019										
219/1:Stl Abutment	ft	49	69	34	31	15	0	0	0	0
1000/1:Corrosion	ft	15	0	0	100	15	0	0	0	0
Notes:Corrosion at east abutment backwall - 10/18/2019										
231/1:Steel Pier Cap	ft	49	69	34	31	15	0	0	0	0
1000/1:Corrosion	ft	15	0	0	100	15	0	0	0	0
Notes:Some rusting on steel pier cap - 10/18/2019										
515/1:Steel Protective Coating	sq.ft	100	70	70	0	0	0	0	30	30
3440/1:Eff (Stl Protect Coat)	sq.ft	30	0	0	0	0	0	0	100	30
Notes:Some area starting to rust. - 10/18/2019										
330/1:Metal Bridge Railing	ft	98	100	98	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	97	97	0	0	0	0	3	3
3440/1:Eff (Stl Protect Coat)	sq.ft	3	0	0	0	0	0	0	100	3
Notes:No protective coating in some areas - 10/18/2019										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/3:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:settled into stream washing away - 10/18/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

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SEC 409

Structure Number: 06-135-15.0

Remarks: NBI Remarks: Some rusting on steel beams of cap & steel stringers. South abutment has rusting at the bottom. Hole in deck south end covered with a steel plate. See photo North and South columns are rusting. 11/6/17 - Due to overburden on deck bridge rail appears to be too low. - 10/18/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-135-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	BOYESEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TRIBUTARY GRAND RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 9 SOUTH BOWMAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 02' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 19' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	165191.9 5108686.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 35 64 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 39 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	35 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 18, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	Y 48 07/05/2016
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	06/29/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Abdelmokarm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-135-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	200	98	195	3	5	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
Notes:Spalls on driving surface of girder north end middle girder - 10/18/2019										
206/3:Timber Column	each	18	100	18	0	0	0	0	0	0
Notes:8 wings columns - 10/18/2019										
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: 11-5-2013 SW & SE Corners around wingwalls have been ripped. 10/4/17 - North & South abutments slightly leaning in towards stream. - 10/18/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-136-20.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Major Collector
04 City	MINNEHAHA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00637 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TRIBUTARY GRAND RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 12 SOUTH BOWMAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.599	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 59' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 18' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	166476.4 5102662.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 27 50 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 30 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	4 Tolerable
29 ADT	30 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 17, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	Y 48 07/07/2016
49 Structure Length	62.99 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.3 Ft Lt-Side	212 Structure Load Rated	06/29/2017
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Abdelmokarm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-136-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	568	100	568	0	0	0	0	0	0
206/3:Timber Column	each	36	100	36	0	0	0	0	0	0
216/1:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	203	100	203	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	125	100	125	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3410/1:Chalk(Steel Protect Coatings)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Most of the surface are dulling - 10/17/2019										
331/1:Re Conc Bridge Railing	ft	125	96	120	4	5	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
Notes:Minor spalling of east concrete bridge railing. - 10/17/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/15/2011 - Minor spalling of east concrete bridge railing. - 10/17/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-136-23.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Major Collector
04 City	MINNEHAHA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00637 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NORTH FORK GRAND RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 15 SOUTH BOWMAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.600	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 57' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 18' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	166217.9 5097795.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 33 60 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1992 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	14 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	3 SC - Unstable
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 17, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.5 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	115.16 Ft.	218 Channel Profile	Y 48 07/07/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/22/1992
	31.5 Ft.	213 Federal Aid Project Number	BRO-6(3)
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Abdelmokarm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-136-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	919	100	919	0	0	0	0	0	0
202/3:Steel Column	each	24	0	0	100	24	0	0	0	0
1000/3:Corrosion	each	24	0	0	100	24	0	0	0	0
Notes:corrosion at water line - 10/17/2019										
515/3:Steel Protective Coating	sq.ft	100	60	60	30	30	10	10	0	0
3420/3:Peel/Bub/Crack(Stl Protect Co	sq.ft	40	0	0	75	30	25	10	0	0
Notes:Protective coating start showing some bubbling and peeling in some areas - 10/17/2019										
219/1:Stl Abutment	ft	66	100	66	0	0	0	0	0	0
231/1:Steel Pier Cap	ft	128	100	128	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	230	100	230	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0

Alert Code 1: 11/15/2011 - Erosion behind SE and SW wing going into roadway. - 10/17/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-137-18.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Major Collector
04 City	MINNEHAHA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00618 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TRIBUTARY GRAND RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	11 SOUTH 5 EAST BOWMAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.699	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 01' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 17' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	167772.6 5104966.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 23 41 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 13 25 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1960 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 17, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.2 Ft.	Underwater	N
48 Length of Max Span	30 Ft.	Other Special	N
49 Structure Length	70.87 Ft.	218 Channel Profile	Y 48 07/07/2016
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/29/2017
	31.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	31.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Abdelmokarm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 06-137-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	640	97	619	3	21	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	20	0	0	100	20	0	0	0	0
Notes:Spalling on north and south outside concrete girders. - 10/17/2019										
1090/1:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:exposed rebar in spalled area on top side of girder, north half - 10/17/2019										
1130/1:Cracking (RC and Other)	ft	100	100	100	0	0	0	0	0	0
Notes:Minor hairline cracking on bottoms of girders. - 10/17/2019										
206/1:Timber Column	each	36	86	31	14	5	0	0	0	0
1160/1:Crack (Timber)	each	5	0	0	100	5	0	0	0	0
Notes:Some of the timber columns have began cracking .cross bracing broken on pier #2 - 10/17/2019										
216/1:Timber Abutment	ft	66	85	56	15	10	0	0	0	0
1160/1:Crack (Timber)	ft	10	0	0	100	10	0	0	0	0
Notes:There is some cracking on the Abutments. - 10/17/2019										
235/1:Timber Pier Cap	ft	203	100	203	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	141	100	141	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3410/1:Chalk(Steel Protect Coatings)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Protective coating very much lost. - 10/17/2019										
331/1:Re Conc Bridge Railing	ft	141	100	141	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1900/1:Distortion	each	1	0	0	100	1	0	0	0	0
Notes:N.W. wing has one plank tilted at an angle. - 10/17/2019										

Remarks: NBI Remarks: Some scour showing on pier 3, 1.7dx3'x5' on upstream side. Both timber abutment caps are tilted out about 1/4". Minor hairline cracks on bottom of concrete girders. 11/15/2011 - Spalling on North and South outside concrete girder. 11/15/2011 - NE side of abutment leaning out 2" from embankment pressure. 11/15/2011 - Spalling with rebar showing on topside of concrete girders (deck.) 11-12-2015- RIP RAP ADDED TO BOTH SIDES OF BRIDGE AND CONCRETE POURED OVER ROCK. SEE PICTURE. - 10/17/2019

Alert Code 2: Exposed rebar on top of girder (Deck) east joint. - 10/17/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-138-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	GRAINBELT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH 6 EAST BOWMAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 16' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 15' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	171382.7 5133942.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 42 76 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 46 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1989 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	65 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	7 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	October 29, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.5 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	44.95 Ft.	218 Channel Profile	Y 48 07/12/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/21/2017
	28.9 Ft.	213 Federal Aid Project Number	BRO-6(9)
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Abdelmokarm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 06-138-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	315	100	315	0	0	0	0	0	0
Notes:SW corner of endwall/backwall broken out. - 10/29/2019										
202/1:Steel Column	each	10	30	3	70	7	0	0	0	0
1000/1:Corrosion	each	7	0	0	100	7	0	0	0	0
Notes:Some rust starting at the bottom of the columns - 10/29/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Peeling on protective coatings @ some areas - 10/29/2019										
219/1:Stl Abutment	ft	62	100	62	0	0	0	0	0	0
231/1:Steel Pier Cap	ft	62	68	42	32	20	0	0	0	0
1000/1:Corrosion	ft	20	0	0	100	20	0	0	0	0
Notes:Steel cap is rusting on top of the piling. - 10/29/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Some rusted area - 10/29/2019										
330/1:Metal Bridge Railing	ft	89	100	89	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3410/1:Chalk(Steel Protect Coatings)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Protective coatings showing some peeling. - 10/29/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Seven piling still have lifting holes visible. Steel cap is rusting on top of the piling. South abutment has a 1/4"-1/2" gap from road. North cap tilted out 1/4". - 10/29/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-140-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	STILLWATER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TRIBUTARY CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH BUFFALO SPRINGS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 16' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 13' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	174480.9 5132365.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2008 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	November 01, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	84.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12'X 7'X 84'RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-140-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	168	100	168	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NEW BOX IN 2008. 11/1/17 - Some erosion/undermining beginning on NE corner.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-140-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	STILLWATER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 NORTH OF BUFFALO SPRING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 15' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 13' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	174385.2 5130529.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2015 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	65 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	November 01, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/19/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 12 x 9 x 54' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-140-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	108	100	108	0	0	0	0	0	0
Notes:_										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: 11-16-2015- BRIDGE WAS REPLACED WITH A PRECAST DBL 12 X 9 X 54 PRECAST BOX FALL 2015.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-140-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	SCRANTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BUFFALO CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	EAST OF BUFFALO SPRINGS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 14' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	173210.8 5122353.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 36 65 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 39 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1975 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	75 30 Year of ADT 2019	72 App. Rdwy. Alignment	3 Intolerable - Correct
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 31, 2019
32 Approach Roadway Width	21 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	Y 48 07/12/2016
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	06/29/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-140-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	200	100	200	0	0	0	0	0	0
206/1:Timber Column	each	10	100	10	0	0	0	0	0	0
216/1:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10.31.19 - No issues found. - 10/31/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-142-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	STILLWATER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 NORTH 2 WEST SCRANTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 15' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 10' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	177661.5 5131622.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	99 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	54 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1922 106 Yr Reconstructed	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	15 30 Year of ADT	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 29, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.0 Ft.	Other Special	N
48 Length of Max Span	25 Ft.	218 Channel Profile	Y 48 07/11/2016
49 Structure Length	27.89 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	02/24/1998
51 Bridge Rdwy Width - Curb to Curb	22.0 Ft.	213 Federal Aid Project Number	KLINE
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Abdelmokarm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-142-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	673	100	673	0	0	0	0	0	0
206/1:Timber Column	each	18	100	18	0	0	0	0	0	0
Notes:8 Columns at the wings - 10/29/2019										
216/1:Timber Abutment	ft	43	100	43	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	43	100	43	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	56	100	56	0	0	0	0	0	0
8401/1:Wings	each	4	50	2	50	2	0	0	0	0
1140/1:Decay/Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:N.W. wings has one plank broke - 10/29/2019										
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Deep erosion scour in S.W. ditch at end wing - 10/29/2019										

Remarks: NBI Remarks: South abutment horizontal pier column support cracked. 11-6-2013 Deep erosion scour in SW ditch at end of wing. 11-16-2015 NW WING HAS 1 PLANK BROKE. - 10/29/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-143-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	STILLWATER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TRIBUTARY CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 NORTH 1 WEST SCRANTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 16' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 10' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	177808.8 5133650.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2012 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 01, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	29.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	12/31/2013
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 14 X 8 X 60' PCRBC		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-143-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
245/3:Pre Concrete Culvert	ft	120	100	120	0	0	0	0	0	0
Notes: _										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Replaced with DOUBLE 14X8X60 PRECAST BOX IN 2012. 11-6-2013 Cattle panels in openings on south end.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-143-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	WHITING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 SOUTH 1 WEST SCRANTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 04' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 10' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	177416.7 5110901.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 23 42 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 26 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	39 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	Y 48 07/06/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.5 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.8 Ft.	213 Federal Aid Project Number	BRO-6(10)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Abdelmokarm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 06-143-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	322	100	322	0	0	0	0	0	0
202/1:Steel Column	each	12	42	5	58	7	0	0	0	0
7000/1:Damage	each	7	0	0	100	7	0	0	0	0
Notes:Seven of the piling still have lifting holes visible. - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	100	80	80	20	20	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co	sq.ft	20	0	0	100	20	0	0	0	0
Notes:Some of the paint peeling off. - 10/30/2019										
219/1:Stl Abutment	ft	62	100	62	0	0	0	0	0	0
231/1:Steel Pier Cap	ft	62	100	62	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	80	80	20	20	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co	sq.ft	20	0	0	100	20	0	0	0	0
Notes:Paint peeling off pier cap mostly underside. - 10/30/2019										
330/1:Metal Bridge Railing	ft	79	100	79	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3410/1:Chalk(Steel Protect Coatings)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Bridge railing showing some loss of paint. - 10/30/2019										
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Seven of the piling still have lifting holes visible. 10/30/2019 - Paint peeling off pier cap mostly underside. - 10/30/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-144-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	SCRANTON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	CITY OF SCRANTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 08' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 08' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	179729.6 5118958.6	Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 38
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 22
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden 1	None	209 Posted in "Tons"	06 Tons
Age and Service		Appraisal	
27 Yr Built 1958 106 Yr Reconstructed	-1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT 30 30 Year of ADT	2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	1 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 31, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	25.6 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	Y 48
49 Structure Length	92.85 Ft.	Chaining Date	07/06/2016
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	None
	1.0 Ft Lt-Side	212 Structure Load Rated	-1
51 Bridge Rdwy Width - Curb to Curb		213 Federal Aid Project Number	06/30/2017
	24.3 Ft.	214 Delayed Inspection	Not Applicable
52 Deck Width	25.6 Ft.	216 Inspector	Eslinger, Lutes
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	Navigation Data	
54 Min Vert Underclearance	0 Ft. 0 In.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
55 Min Lateral UnderClear. - Rt	99.9 Ft.	40 Navigation Horizontal Clearance	0 Ft.
	N Feature not hwy or RR	111 Pier or Abutment Protection	Unknown (NBI)
56 Min Lateral UnderClear. - Lt	0.0 Ft.	116 Minimum Navigation Vertical Clearance	Ft.
210 Culvert / 211 Description			

Structure Number: 06-144-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	744	54	400	19	144	27	200	0	0
Notes:West and middle segments showing more deterioration then the east segment. - 10/31/2019										
1080/1:Delamination/Spall/Patched Area	ft	150	0	0	0	0	100	150	0	0
Notes:alert code 2 spalling w/ delam & exposed rebar on bottom side of beams 40-50% - 10/31/2019										
1090/1:Exposed Rebar	ft	50	0	0	0	0	100	50	0	0
Notes:exposed rebar bottom side of beams 40-50%, rebar is still bonded but exposed. - 10/31/2019										
1130/1:Cracking (RC and Other)	ft	144	0	0	100	144	0	0	0	0
Notes:cracking in diaphragms over piers, and on underside of girders. - 10/31/2019										
206/3:Timber Column	each	20	100	20	0	0	0	0	0	0
216/1:Timber Abutment	ft	60	100	60	0	0	0	0	0	0
Notes:se corner of bridge approach scouring through to the abutment - 10/31/2019										
235/1:Timber Pier Cap	ft	60	100	60	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	187	100	187	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	187	100	187	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:se corner of bridge approach scouring through to the abutment - 10/31/2019										

Remarks: _ NBI Remarks: Cracking in diaphragms over piers. SE corner of bridge approach scouring through to the abutment. 10-31-19 west segment more deterioration than east, two areas in middle - 10/31/2019

Alert Code 2: 11-12-2015 -Spalling with delamination & exposed rebar on bottom side of beams 40-50%. - 10/31/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-144-17.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Major Collector
04 City	WHITING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00645 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LIGHTNING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 SOUTH OF SCRANTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	7.399	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 02' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 08' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	179586.9 5106486.1	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2010 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	170 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	9 Above Desirable Crit
19 Bypass, Detour Length	9 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 06, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	36.0 Ft.	Underwater	N
48 Length of Max Span	15 Ft.	Other Special	N
49 Structure Length	33.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	02/24/2011
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
Double 16 X 8 X 62 RCB Precast		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-144-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/2:Re Conc Culvert Precast	ft	134	100	134	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0

Remarks: New Precast Box in 2010**Alert Code 2:** 11/6/17 - Exposed rebar top of SE wing where box and wing meet.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-145-23.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Major Collector
04 City	GOLDFIELD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00645 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GRAND RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	13 SOUTH 1 EAST SCRANTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 57' 29.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 07' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	180720.6 5097641.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2006 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	36 Ft.	90 Date of Last Inspection	November 06, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	35.8 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	SC-0645(054)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14'X10'X 62'RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-145-23.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
245/3:Pre Concrete Culvert	ft	124	96	119	4	5	0	0	0	0
Notes:_										
1110/3:Cracking (PSC)	ft	5	0	0	100	5	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Spalls on all lift holes both north & south walls. 11/6/17 - West inner wall has a crack first 2 sections.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-146-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	BUENA VISTA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH 2 EAST SCRANTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 14' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 06' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	183521.1 5129941.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		Railroad (live load for which structure was designated)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2015 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	November 01, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	25.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	9 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/19/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 9 X 6 55' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-146-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	110	100	110	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes: _										

Remarks: 11-13-2015 -STRUCTURE REPLACED BY A DBL 9 X 6 X 55 PRECAST BOX. BOX IS SKEWED 25 DEGREES. 11/1/17 - Missing a popit cover in East barrel South end, dirt is coming through.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-147-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	GASCOYNE CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BUFFALO CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	SOUTH OF GASCOYNE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 06' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 04' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	184828.7 5114618.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 40 73 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2008 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 06, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.7 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	20.0 Ft.	212 Structure Load Rated	12/21/2017
52 Deck Width	60.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14'X 7'X 60'RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-147-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	120	100	120	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NEW BOX IN 2008.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-147-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	HALEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LIGHTNING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 SOUTH OF GASCOYNE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 00' 27.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 04' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	184238.8 5102974.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 06, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-6(4)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X9X44' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-147-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	89	94	84	6	5	0	0	0	0
1130/2:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Hairline cracks on floor and walls. 11-7-2013 Efflorescence on wall cracks & NE wing wall cracks.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-148-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	BUENA VISTA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 10 NORTH GASCOYNE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 16' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 03' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	187321.6 5132363.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 36 65 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 39 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	October 29, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	Y 48 07/06/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	12/21/2017
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	BRO-6(1)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Abdelmokarm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-148-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	400	100	400	0	0	0	0	0	0
202/1:Steel Column	each	14	100	14	0	0	0	0	0	0
Notes:With wings - 10/29/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Protective coating maybe weathering steel. - 10/29/2019										
219/1:Stl Abutment	ft	56	100	56	0	0	0	0	0	0
231/1:Steel Pier Cap	ft	56	50	28	50	28	0	0	0	0
1000/1:Corrosion	ft	10	100	10	0	0	0	0	0	0
Notes:Minor corrosion of metal under paint. - 10/29/2019										
1900/1:Distortion	ft	28	0	0	100	28	0	0	0	0
Notes:North steel cap is tilted 1/4" towards channel. - 10/29/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	100	100	0	0	0	0	0	0
Notes:Coating failing, casing spots to rust out underneath. - 10/29/2019										
330/1:Metal Bridge Railing	ft	98	50	49	50	49	0	0	0	0
1000/1:Corrosion	ft	49	0	0	100	49	0	0	0	0
Notes:Bridge railing start showing corrosion - 10/29/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	69	69	31	31	0	0
3410/1:Chalk(Steel Protect Coatings)	sq.ft	51	0	0	100	51	0	0	0	0
Notes:Peeling on protective coatings. - 10/29/2019										
3430/1:Ox Flm/Txt Adhr(Stl Prot Coat)	sq.ft	49	0	0	37	18	63	31	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: North steel cap is tilted 1/4" towards channel. - 10/29/2019**Alert Code 1:** Erosion behind all wings starting to erode into roadway. - 10/29/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-150-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	HALEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LIGHTNING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	11 SOUTH 6 EAST SCRANTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 59' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 01' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	188876.7 5100631.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	2 Concrete Precast Panel	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 31 56 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1987 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	64.96 Ft.	218 Channel Profile	Y 48 07/06/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	03/04/1996
52 Deck Width	30.2 Ft.	213 Federal Aid Project Number	BRO-6(8)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Abdelmokarm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-150-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,830	100	1,830	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	259	100	259	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	131	100	131	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	60	60	0	0	30	30	10	10
3420/1:Peel/Bub/Crack(Stl Protect Co	sq.ft	30	0	0	0	0	100	30	0	0
Notes:Started showing some peeling. - 10/18/2019										
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-151-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Bowman	26 Functional	Rural, Local
04 City	BUENA VISTA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SOUTH CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 NORTH 7 EAST SCANTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 14' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 00' 23.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	191193.6 5129549.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 73 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	23 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1987 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	19 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 29, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.3 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	Y 48 07/06/2016
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/30/2017
	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Abdelmokarm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 06-151-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	200	93	185	8	15	0	0	0	0
Notes:Segregated concrete areas on bottom of girders showing exposed rebar - 10/29/2019										
1090/1:Exposed Rebar	ft	15	0	0	100	15	0	0	0	0
Notes:Exposed rebar along bottom of the beams. - 10/29/2019										
202/1:Steel Column	each	19	100	19	0	0	0	0	0	0
Notes:9 column on wings - 10/29/2019										
515/1:Steel Protective Coating	sq.ft	100	80	80	0	0	20	20	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	20	0	0	0	0	100	20	0	0
Notes:Loss of paint mostly on wings column and at waterline - 10/29/2019										
216/1:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
231/1:Steel Pier Cap	ft	52	100	52	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	75	75	25	25	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	25	0	0	100	25	0	0	0	0
Notes:Peeling of protective coating and changing color at pier cap - 10/29/2019										
330/1:Metal Bridge Railing	ft	49	51	25	49	24	0	0	0	0
1000/1:Corrosion	ft	24	0	0	100	24	0	0	0	0
Notes:Some corrosion on bridge railing. . - 10/29/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	75	75	25	25	0	0
3410/1:Chalk(Steel Protect Coatings)	sq.ft	75	0	0	100	75	0	0	0	0
Notes:Loss of paint. - 10/29/2019										
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	25	0	0	0	0	100	25	0	0
Notes:Peeling of protective coating. (see pictures) - 10/29/2019										
331/1:Re Conc Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Nuts & bolts missing on a few beam ties. Erosion evident by all wingwalls. 11/17/2011 - Top two plank on east abutment leaning out. 11-6-2013 Posts holding metal rail are cracked and spalled. - 10/29/2019

Alert Code 2: 11-13-2015 -EXPOSED REBAR ALONG BOTTON OF THREE OF THE BEAMS. - 10/29/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 07-130-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Burke	26 Functional	Rural, Local
04 City	WARD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	STONY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 1 SOUTH BOWBELLS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 47' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 17' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	258872.1 5410121.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 52 95 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 31 57 Tons
208 Dk Overburden	201 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	30 Tons
27 Yr Built	1978 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	19 Ft.	90 Date of Last Inspection	August 01, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 06/05/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	26.2 Ft.	212 Structure Load Rated	12/22/2017
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 07-130-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	217	99	215	1	2	0	0	0	0
206/1:Timber Column	each	26	0	0	100	26	0	0	0	0
216/1:Timber Abutment	ft	56	0	0	100	56	0	0	0	0
235/1:Timber Pier Cap	ft	56	0	0	100	56	0	0	0	0
331/1:Re Conc Bridge Railing	ft	62	0	0	100	62	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor scour under structure. Minor spall on bottom of 1st beam from east & 1st beam from west.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 07-130-16.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Burke	26 Functional	Rural, Local
04 City	WARD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	STONY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 2 SOUTH BOWBELLS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 46' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 17' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	258724.0 5406955.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 53 96 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 32 59 Tons
208 Dk Overburden	201 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	20 Tons
27 Yr Built	1978 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	19 Ft.	90 Date of Last Inspection	August 01, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	1 48 06/05/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	26.2 Ft.	212 Structure Load Rated	12/22/2017
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 07-130-16.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	210	99	208	1	2	0	0	0	0
206/1:Timber Column	each	26	0	0	100	26	0	0	0	0
216/1:Timber Abutment	ft	59	0	0	100	59	0	0	0	0
235/1:Timber Pier Cap	ft	59	0	0	100	59	0	0	0	0
331/1:Re Conc Bridge Railing	ft	59	0	0	100	59	0	0	0	0
8398/1:Slope Protection	each	1	0	0	0	0	0	0	100	1
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor scour under structure. Minor spall at center of first t-beam from west. Minor spall in bottom of 4th t-beam from west at north end. 11/2014- NE End Abutment Column has started to crack about 2 feet only in center of Column

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 07-132-14.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	82.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Burke	26 Functional	Rural, Major Collector
04 City	BOWBELLS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00731 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	STONY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	AT BOWBELLS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	6.399	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 47' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 14' 23.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	262104.0 5410051.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 27 50 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 30 Tons
208 Dk Overburden	301 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1952 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	190 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	8.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	July 31, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.2 Ft.	Underwater	N
48 Length of Max Span	34 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	1 48 05/22/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	30.5 Ft.	212 Structure Load Rated	12/22/2017
52 Deck Width	31.2 Ft.	213 Federal Aid Project Number	CS-101(7)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Ishenower
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 07-132-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	361	0	0	99	356	1	5	0	0
206/1:Timber Column	each	24	0	0	100	24	0	0	0	0
216/1:Timber Abutment	ft	69	0	0	100	69	0	0	0	0
235/1:Timber Pier Cap	ft	69	0	0	100	69	0	0	0	0
331/1:Re Conc Bridge Railing	ft	72	0	0	97	70	3	2	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: The piling cap splices at the ne and sw corners have minor longitudinal cracks. Channel beams have numerous hairline cracks. Minor scour under structure. The south end of east curb has minor damage with exposed rebar, first two feet.

Alert Code 1: The first and second channel beams from the east and the second channel beam from the west have minor spalls with exposed rebar. 01/2017: Staining and corrosion has started.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 07-133-19.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Burke	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	1 On Interstate STRAHNET
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH OF NIOBE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	0000000000 00	105 Federal Lands Highways	Not applicable
16 Latitude	48d 43' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 13' 05.00"	112 NBIS Bridge Length	No
GPS Coordinates XY	263382.5 5402620.8	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	0 Other	Load Rating and Posting	
		31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2007 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	160 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	July 31, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	10.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	Y
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/01/2007
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	0.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
SINGLE, 6-5X60'CSP		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 07-133-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	60	100	60	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	80	80	0	0	20	20	0	0

Remarks: TE Route NBI Remarks: Loose rock riprap placed at inlet & outlet ends of pipe. Approx. 3.5' of cover over pipe.
01/2017 - Slight bowing in culvert center. Minor corrosion in bottom of culvert approximately 20' from east end.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 07-133-19.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Burke	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	1 On Interstate STRAHNET
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH OF NIOBE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	0000000000 00	105 Federal Lands Highways	Not applicable
16 Latitude	48d 43' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 13' 05.00"	112 NBIS Bridge Length	No
GPS Coordinates XY	263368.8 5402617.0	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	0 Other	Load Rating and Posting	
		31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2007 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	160 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	July 31, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	10.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	Y
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/01/2007
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	0.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
SINGLE, 6-5 X 60' CSP		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 07-133-19.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	60	100	60	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0

Remarks: TE Route NBI Remarks: Loose rock riprap placed at inlet & outlet ends of pipe. Approx. 3.5' of cover over pipe.
01/2017 - Slight bowing of culvert at center.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 07-135-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Burke	26 Functional	Rural, Local
04 City	BOWBELLS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	STONY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 1 SOUTH BOWBELLS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 48' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 10' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	266934.4 5410303.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	August 01, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-7(4)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Ishenower
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X8X52' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 07-135-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	105	85	89	15	16	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Both barrels have numerous hairline vertical cracks in walls. Hairline cracks at junction of parapet and wing, all four corners. Hairline random cracks in ceiling of north barrel with minor efflorescence.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-105-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	AINTEED WOODS TOWNSH	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 5 SOUTH OF WILTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 05' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 52' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	358214.3 5217064.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1994 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	33.8 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X9X34' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-105-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	66	0	0	100	66	0	0	0	0
1010/3:Cracking	ft	66	0	0	100	66	0	0	0	0
Notes:Both west and east barrel have horizontal crack at top bevel where top and wall meet and run entire length of box - 11/13/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/2:Headwalls	each	2	50	1	50	1	0	0	0	0
1130/2:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:South headwall has 2 cracks - 11/13/2019										

Remarks: MINOR CRACKS ON BOTH FLARED ENDS. VERY HEAVY VEGETATION IN CHANNEL BOTH UP AND DOWN STREAM. SOME MINOR EROSION BY NE, NW AND SW WINGS. - 11/13/2019

Alert Code 1: East barrel and west barrel have longitudinal cracking toward the top where roof meets the sides. very minor but in most segments of barrels. 1' of mud in both barrels. - 11/13/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-105-32.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City		37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MISTY WATERS BAY	102 Direction of Traffic	2 2-way traffic
09 Location	MISTY WATERS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 52' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 52' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	357400.0 5192234.9	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 39 70 Tons
208 Dk Overburden	33 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2006 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 12, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	33.6 Ft.	Underwater	N
48 Length of Max Span	82 Ft.	Other Special	N
49 Structure Length	82.00 Ft.	218 Channel Profile	1 48 05/23/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/02/2012
	26.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	34.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Mertz, Dockter
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	0 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-105-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	1,056	100	1,056	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	74	100	74	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/1:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Grouted riprap at north abutment has pulled away approximately 6-8 inches entire width. Grouted riprap has pulled away from south abutment approximately 6-12 inches. - 11/12/2019										
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1130/1:Cracking (RC and Other)	each	4	75	3	25	1	0	0	0	0
Notes:northeast wing is cracked at the top closest to the deck. - 11/12/2019										

Remarks: 12/11/18- Grouted riprap at N abutment has pulled away from wall 6-8" entire width S abutment pulled away 6-12". Riprap @ SW wing has moved and exposed fabric behind wing and causing erosion behind wing - 11/12/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-107-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BURNT CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH 2 WEST BISMARCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 48' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	361885.9 5197298.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 36 65 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 39 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	3 Intolerable - Correct
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	68 Ft.	Other Special	N
49 Structure Length	70.87 Ft.	218 Channel Profile	1 48 06/05/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	12/22/2017
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	BRO-8(9)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Mertz, Dockter
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 08-107-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	709	99	705	1	4	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
217/3:Masonry Abutment	ft	59	100	59	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	141	100	141	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	95	95	5	5	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	5	0	0	100	5	0	0	0	0
331/2:Re Conc Bridge Railing	ft	43	100	43	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/11/18- POOR ROADWAY ALIGNMENT TO SOUTH. SHEET PILE DAM 20' DOWNSTREAM. 1'-3" hole SE corner of bridge. Gravel falling onto pier cap. Spalls on under side to deck and there is 4 hew areas about to spall out 1/2' x 1/2' - 11/13/2019

Alert Code 1: 12/11/18 North pier cap has started to settle into the tops of the columns, each column on top has timber splinter showing from the cap crushing into the top of the column. - 11/13/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-108-28.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BURNT CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 6 NORTH BISMARCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 48' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	362784.0 5198405.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 26 48 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	November 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	68 Ft.	Other Special	N
49 Structure Length	70.87 Ft.	218 Channel Profile	1 48 06/05/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	212 Structure Load Rated	06/21/1995
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	SOS-8(5)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Mertz, Dockter
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-108-28.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	709	100	709	0	0	0	0	0	0
206/3:Timber Column	each	16	88	14	6	1	6	1	0	0
1140/3:Decay/Section Loss	each	1	0	0	0	0	100	1	0	0
1180/3:Abrasion	each	1	0	0	100	1	0	0	0	0
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	141	96	135	0	0	4	6	0	0
1170/2:Split/Delamination (Timber)	ft	6	0	0	0	0	100	6	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/11/18- PILE S3 ON EAST ABUT HAS SOME CRUSHING @ GROUNDLINE. 6' of SW bridge railing broke. -
11/13/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-109-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BURNT CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 NORTH OF BISMARCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 46' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	365222.6 5201575.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 29 53 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1970 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	35 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 13, 2019
32 Approach Roadway Width	25 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	1 48 06/05/2019
49 Structure Length	37.07 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	12/22/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Mertz, Dockter
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 08-109-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	295	98	289	2	6	0	0	0	0
1090/2:Exposed Rebar	ft	6	0	0	100	6	0	0	0	0
206/3:Timber Column	each	10	70	7	20	2	10	1	0	0
1160/3:Crack (Timber)	each	1	0	0	0	0	100	1	0	0
7000/3:Damage	each	2	0	0	100	2	0	0	0	0
216/3:Timber Abutment	ft	56	46	26	41	23	13	7	0	0
1180/3:Abrasion	ft	30	0	0	77	23	23	7	0	0
235/2:Timber Pier Cap	ft	56	50	28	50	28	0	0	0	0
1180/2:Abrasion	ft	28	0	0	100	28	0	0	0	0
331/2:Re Conc Bridge Railing	ft	75	100	75	0	0	0	0	0	0
8401/2:Wings	each	4	0	0	75	3	25	1	0	0
1160/2:Crack (Timber)	each	1	0	0	0	0	100	1	0	0
1180/2:Abrasion	each	3	0	0	100	3	0	0	0	0

Remarks: 12/11/18- CHANNEL DOWNSTREAM HAS MOVED Laterally TO THE EAST. PILE BROKE IN NE WING. NORTH PILE WEST BACKWALL HAS SOME MINOR ICE DAMAGE. North pile west abutment has ice damage 5% section loss. South pile west abutment has minor ice damage. - 11/13/2019

Alert Code 1: West cap north end 1/2 off piling. No recent movement. - 11/13/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-110-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	GLENVIEW TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BURNT CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH OF BALDWIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 02' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 44' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	367101.9 5212165.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 44 80 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 46 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	November 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	53.15 Ft.	218 Channel Profile	1 48 06/05/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.5 Ft.	212 Structure Load Rated	12/22/2017
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	CP-0817(79)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-110-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	423	100	423	0	0	0	0	0	0
206/3:Timber Column	each	14	71	10	29	4	0	0	0	0
1180/3:Abrasion	each	4	0	0	100	4	0	0	0	0
Notes:To column on north abutment have abrasion and 2 columns on south abutment have abrasion - 11/13/2019										
216/3:Timber Abutment	ft	59	85	50	15	9	0	0	0	0
1900/3:Distortion	ft	9	0	0	100	9	0	0	0	0
Notes:9ft of the south abutment leaning away - 11/13/2019										
235/1:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	105	100	105	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: SOUTH ABUTMENT IS SHOWING MINOR BOWING OUT FOR 9'. - 11/13/2019**Alert Code 1:** NW corner of bridge has a 1' wide X 2' deep hole by it. Fill is being lost through wing and backwall. - 11/13/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-110-21.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Major Collector
04 City	GLENVIEW TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00822 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BURNT CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF BALDWIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.900	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 01' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 45' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	366663.2 5209602.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 48 87 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	34 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	170 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	32 Ft.	90 Date of Last Inspection	November 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.5 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	45.93 Ft.	218 Channel Profile	1 48 06/05/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/03/2018
	31.5 Ft.	213 Federal Aid Project Number	CER-0822(51)
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 08-110-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	367	0	0	100	367	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	367	0	0	100	367	0	0	0	0
Notes:Bottom of girders look good. Top must be delaminated but can't see due to asphalt overlay. - 11/13/2019										
216/3:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
225/3:Steel Pile	(EA)	10	100	10	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:The coating has limited effectiveness. - 11/13/2019										
235/1:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	92	100	92	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Bridge rail coating is substantially effective but is starting to loose effectiveness. - 11/13/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: BRIDGE HAS 4" OF ASPHALT OVERLAY ON IT AND CAN NO LONGER SEE THE TOP OF THE BEAMS.
Fence across N opening is laying down. Fence across south opening is also laying down. - 11/13/2019

Structure Number: 08-110-21.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	69.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	GLENVIEW TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BURNT CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH OF BALDWIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 02' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 44' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	367085.4 5211040.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 46 83 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 26 47 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	2019 -1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	November 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	53.15 Ft.	218 Channel Profile	1 48 06/05/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.5 Ft.	212 Structure Load Rated	01/03/2018
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, inspector1
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 08-110-21.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	423	100	423	0	0	0	0	0	0
219/1:Stl Abutment	ft	59	100	59	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
225/1:Steel Pile	(EA)	10	100	10	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Coating on pile is still substantial effective - 11/18/2019										
235/1:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	105	100	105	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: FENCE ACROSS east opening and 1 single wire fence across west opening Poor vertical alignment to south. - 11/18/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-110-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BURNT CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 9 NORTH BISMARCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 44' 60.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	366883.8 5202529.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 43 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	November 14, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	1 48 06/05/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.5 Ft.	212 Structure Load Rated	01/14/2008
52 Deck Width	30.2 Ft.	213 Federal Aid Project Number	CP-0806(79)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Mertz, Dockter
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 08-110-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	322	100	322	0	0	0	0	0	0
206/3:Timber Column	each	11	91	10	9	1	0	0	0	0
1170/3:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
216/3:Timber Abutment	ft	59	92	54	9	5	0	0	0	0
1900/3:Distortion	ft	5	0	0	100	5	0	0	0	0
235/1:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	79	100	79	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/12/18 - 2nd pile from east on south abutment top 2' split, 10% section loss on top. South abutment west end has 5' of planks seperating minimal fill loss. . - 11/14/2019

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SEC 409

Structure Number: 08-110-41.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	-2.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
8 Other (incl to 0 None of th	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	APPLE CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	5 SOUTH OF US 83	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	No
GPS Coordinates XY	366070.8 5177912.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	9 No Deficiencies
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 9 (H 10) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 52 94 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 13 24 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2007 106 Yr Reconstructed	Appraisal	
42 Type of Service	3 Pedestrian-bicycle - On	67 Structural Condition	
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	1	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	1 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	0 Miles	36 Traffic Safety Features	1 N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	10 Ft.	90 Date of Last Inspection	November 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	9.8 Ft.	Underwater	N
48 Length of Max Span	134 Ft.	Other Special	N
49 Structure Length	133.86 Ft.	218 Channel Profile	1 48 05/23/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	9.8 Ft.	213 Federal Aid Project Number	AC-HPP-SS-TES-1-804(023)072
52 Deck Width	12.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, McCloud
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 08-110-41.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,608	100	1,608	0	0	0	0	0	0
115/1:Pre Conc Stringer	ft	268	100	268	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	26	100	26	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/12/18: All 4 Abutment wings have minor cracking. A few skid plates loose. West beam has a few hairline cracks N&S end. 11/20/2019: No Changes - 11/20/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-111-05.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	WILSON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PAINTED WOODS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 7 NORTH OF WILTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	369254.5 5235855.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 25 45 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 15 27 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	201 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1970 106 Yr Reconstructed	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	20 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 04, 2018
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	57 Ft.	218 Channel Profile	1 48 05/23/2019
49 Structure Length	61.02 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/03/2018
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-111-05.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	489	100	489	0	0	0	0	0	0
206/3:Timber Column	each	10	0	0	100	10	0	0	0	0
1160/3:Crack (Timber)	each	1	0	0	100	1	0	0	0	0
1180/3:Abrasion	each	9	0	0	90	9	0	0	0	0
216/3:Timber Abutment	ft	52	0	0	4	52	0	0	0	0
1140/3:Decay/Section Loss	ft	52	0	0	100	52	0	0	0	0
235/1:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	121	99	120	1	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/04/18- No bridge rail. Some minor staining on all piling. 1 column south abutment has crack going down the pile, Conc bridgrail has spall 1'x5" NE corner with rebar exposed no section lose.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-111-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BURNT CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 8 NORTH BISMARCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 58' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 43' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	368494.1 5203108.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 49 89 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 29 54 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 14, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	41.01 Ft.	218 Channel Profile	1 48 06/05/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.5 Ft.	212 Structure Load Rated	01/03/2018
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	CP-808(79)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Mertz, Dockter
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-111-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	1,230	100	1,229	0	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
206/3:Timber Column	each	10	100	10	0	0	0	0	0	0
216/3:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	82	100	82	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/12/18 - 1'x1' spall on bottom side of girder east end. - 11/14/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-112-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 9 NORTH BISMARCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 58' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 42' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	370127.7 5203890.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 29 52 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 31 Tons
208 Dk Overburden	22 Gravel/Dir	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	November 14, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.5 Ft.	Underwater	N
48 Length of Max Span	34 Ft.	Other Special	N
49 Structure Length	37.07 Ft.	218 Channel Profile	1 48 06/05/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/03/2018
	30.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Mertz, Dockter
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-112-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	371	99	366	1	4	0	1	0	0
1080/1:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
1090/1:Exposed Rebar	ft	1	0	0	0	0	100	1	0	0
206/3:Timber Column	each	10	100	10	0	0	0	0	0	0
216/3:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	75	99	74	1	1	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
332/2:Timb Bridge Railing	ft	75	100	75	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: SOME SMALL SPALLS ON BEAMS VERY MINOR. 1 ft spall on NE corner of concrete railing. Girder W3 has a 1'x1' spall with exposed rebar. - 11/14/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-113-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Urban, Local
04 City	GRASS LAKE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 4 NORTH OF WILTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 12' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 41' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	371689.5 5230457.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1999 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	November 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.2 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	22.97 Ft.	218 Channel Profile	– -1 01/01/1901
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BURLEIGH COUNTY
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 11X5X32' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-113-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	66	100	66	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
8402/2:Headwalls	each	2	50	1	50	1	0	0	0	0
1130/2:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0

Notes:South head wall has crack. - 11/7/2019

Remarks: Channel is full of cattails, sediment in east barrel 1/2' and runs 3/4' the length of barrel. South head wall has a crack. - 11/7/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-115-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	WILSON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PAINTED WOODS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 8 NORTH OF WILTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 16' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 38' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	375741.9 5236410.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 47 85 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 21 39 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	November 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	66 Ft.	Other Special	N
49 Structure Length	69.88 Ft.	218 Channel Profile	1 48 05/23/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/04/2018
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	BRO-8(4)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-115-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,959	100	1,959	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	279	100	279	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	140	100	140	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Curb Cracked at rail post locations west side. Minor cracking on abutments where backwalls meet abutments all corners. NE end concrete rail post has a 1'spall. - 11/7/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-116-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	GIBBS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 4 NORTH MENOKEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 52' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 38' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	375186.5 5193264.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2001 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	65 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	November 14, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	38.4 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	38.4 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	40.4 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Mertz, Dockter
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X9X40' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-116-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
243/3:Other Culvert	ft	80	99	79	1	1	0	0	0	0
1090/3:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: TWO SMALL SPALLS ON TOP OF NORTH HEADWALL. LONGITUDINAL CRACKS 10' ON BOTH OUTSIDE WALLS WHERE IT MEETS THE ROOF. Spall west barrel 1'x1' with exposed rebar no section lose. - 11/14/2019

Alert Code 1: The north end of third section in East barrel has 3 missing plug in the lifting hole and is letting gravel into barrel. and 6 in the west barrel. One plug about to pop out SW corner on top. - 11/14/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-117-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	STEIBER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 7 NORTH OF WILTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 15' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 36' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	378024.1 5235163.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 29 53 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1958 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	30 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 04, 2018
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 04/26/2017
49 Structure Length	32.15 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	07/03/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 08-117-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	256	90	231	10	25	0	0	0	0
1130/1:Cracking (RC and Other)	ft	25	0	0	100	25	0	0	0	0
206/3:Timber Column	each	10	0	0	70	7	20	2	10	1
1140/3:Decay/Section Loss	each	3	0	0	0	0	67	2	33	1
Notes: _										
1180/3:Abrasion	each	7	0	0	100	7	0	0	0	0
216/3:Timber Abutment	ft	56	0	0	82	46	18	10	0	0
1900/3:Distortion	ft	56	0	0	82	46	18	10	0	0
Notes: _										
235/1:Timber Pier Cap	ft	56	0	0	82	46	18	10	0	0
1180/1:Abrasion	ft	56	0	0	82	46	18	10	0	0
Notes: _										
331/2:Re Conc Bridge Railing	ft	66	99	65	2	1	0	0	0	0
1090/2:Exposed Rebar	ft	1	0	0	8	1	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/04/18- All piling show staining at waterline. SW end of south curb has a 1'spall with steel exposed. Poor channel alignment from the south. 2 pile in the east abutment showing distress. The east abutment is leaning back 2 inches. The middle pile of the west abutment is showing distress, shell rot. SW corner 1'x6"x1" deep at SW corner.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-117-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	ESTHERVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 EAST 2 NORTH OF WILTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 11' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 36' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	378682.3 5227824.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 49 88 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 29 52 Tons
208 Dk Overburden	23 Gravel/Dir	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	44.95 Ft.	218 Channel Profile	1 48 04/26/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.5 Ft.	212 Structure Load Rated	01/04/2017
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-117-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	361	100	361	0	0	0	0	0	0
219/1:Stl Abutment	ft	59	100	59	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
225/1:Steel Pile	(EA)	10	100	10	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Losing some effectiveness of coating on pile - 11/7/2019										
235/1:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	89	94	84	0	0	6	5	0	0
1170/2:Split/Delamination (Timber)	ft	5	0	0	0	0	100	5	0	0
Notes:NW top bridge rail and post split - 11/7/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/04/18- Scour around sw and se wings.Top rail of west bridge railing 8 ft from from north broken. First post also broken. Beaver dam downstream ruffly 30'. - 11/7/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-117-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	GHYLIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 6 SOUTH OF WILTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 04' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 38' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	375812.5 5214225.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 34 62 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 38 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.2 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	1 48 06/13/2019
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	30.5 Ft.	212 Structure Load Rated	07/03/2017
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, inspector1
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-117-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	259	100	259	0	0	0	0	0	0
219/3:Stl Abutment	ft	66	100	66	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
225/3:Steel Pile	(EA)	10	100	10	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Coating is still effective but starting to lose some protection at water line - 11/18/2019										
235/1:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	52	100	52	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	52	100	52	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: SPALLING ON BOTH ENDS OF EACH CHANNEL BEAM WHERE PIN HOLDS BEAMS TO CAP. - 11/18/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-117-36.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	GIBBS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	APPLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST OF MENOKEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 36' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	377567.7 5186458.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 39 71 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 23 43 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1974 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	November 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	68 Ft.	Other Special	N
49 Structure Length	69.88 Ft.	218 Channel Profile	1 48 06/04/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	01/04/2018
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, McCloud
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-117-36.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	699	96	671	4	28	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	28	0	0	100	28	0	0	0	0
215/3:Re Conc Abutment	ft	62	95	59	5	3	0	0	0	0
330/2:Metal Bridge Railing	ft	43	100	43	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	141	100	141	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/26/18- POOR ROADWAY ALIGNMENT. ONE CONCRETE DROP DAM UPSTREAM. ONE STEEL SHEET PILE DOUBLE DAM DOWNSTREAM. A 1' X 2' spall on south abutment under 2nd beam from east. A 6" spall on north abutment under west beam. 11/19/2019: 1'x6" Spall @ NW corner where girder meets the abutment. - 11/19/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-117-43.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	40.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	MISSOURI TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 SOUTH 4 WEST OF MENOKEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 42' 29.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 37' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	376232.2 5173983.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 14 25 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 3 7 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	28 Gravel/Dirt	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1935 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	50 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 21, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 05/23/2019
49 Structure Length	32.15 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, McCloud
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-117-43.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	786	0	0	100	786	0	0	0	0
1090/1:Exposed Rebar	sq.ft	786	0	0	100	786	0	0	0	0
105/1:Re Clsd Box Girder	ft	66	100	66	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	289	0	0	100	289	0	0	0	0
1000/1:Corrosion	ft	289	0	0	100	289	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
215/3:Re Conc Abutment	ft	49	0	0	100	49	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	49	0	0	100	49	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1190/3:Abrasion(PSC/RC)	each	4	0	0	100	4	0	0	0	0

Remarks: 12/12/18- METAL GUARDRAIL HAS BEEN REMOVED. STRUCTURE HAS BEEN WIDENED WITH CONCRETE CHANNEL BEAM. Both abutments have spalling at the bottom of the wall 50% each side. both abutments have abrasion and wear. 11/20/2019: Channel full of cattails and trees - 11/21/2019

Alert Code 1: Moderate to major erosion behind the NW wing. - 11/21/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-118-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	88.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	STEIBER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MCCLUSKY CANAL R3-0	102 Direction of Traffic	2 2-way traffic
09 Location	11 NORTH 3 WEST OF REGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 18' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 36' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	378966.2 5241299.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 28 51 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 17 31 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1973 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	52 Ft.	Other Special	N
49 Structure Length	107.94 Ft.	218 Channel Profile	1 48 03/16/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/04/2018
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 08-118-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	2,594	99	2,573	1	21	0	0	0	0
1080/2:Delamination/Spall/Patched Area	sq.ft	21	0	0	100	21	0	0	0	0
Notes:Spalls on deck in various locations. Couldn't see many due to deck overburden so left what previous inspection had. - 11/8/2019										
109/1:Pre Opn Conc Girder/Beam	ft	433	100	433	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
302/2:Compressn Joint Seal	ft	285	0	0	100	285	0	0	0	0
2340/2:Seal Cracking	ft	285	0	0	100	285	0	0	0	0
Notes:Seal is compressed and cracking. Can't see all of seal at this time due to overburden. - 11/8/2019										
311/2:Moveable Bearing	each	8	0	0	100	8	0	0	0	0
2210/2:Movement	each	8	0	0	100	8	0	0	0	0
Notes:Moveable bearings all have bent bolts due to excess movement. - 11/8/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Bearing coating is starting loose some effectiveness. - 11/8/2019										
313/2:Fixed Bearing	each	8	100	8	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Coating is starting to loose some effectiveness. - 11/8/2019										
331/1:Re Conc Bridge Railing	ft	217	98	213	2	4	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes:West bridge rail has some spalling. - 11/8/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Expansion joints at pier and both ends are totally compressed. Erosion behind sw wing, 1' wide 2' deep. Bolts on moveable bearings are bent from excess movement. Deck has some minor small spalls throughout deck. Bridge rail has some small spalls on both sides. Minor cracking in both abutments. - 11/8/2019

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SEC 409

Structure Number: 08-118-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	ESTHERVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PAINTED WOODS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 4 NORTH OF REGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 12' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 35' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	379233.8 5230295.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 45 81 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 27 49 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	62 Ft.	Other Special	N
49 Structure Length	63.98 Ft.	218 Channel Profile	1 48 04/26/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	212 Structure Load Rated	01/04/2018
52 Deck Width	30.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 08-118-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	640	98	625	2	15	0	0	0	0
1110/1:Cracking (PSC)	ft	15	0	0	100	15	0	0	0	0
Notes:S1 girder has hairline cracks mostly on west half girder - 11/7/2019										
219/3:Stl Abutment	ft	59	100	59	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Starting to lose Some effectiveness of coating - 11/7/2019										
225/3:Steel Pile	(EA)	14	100	14	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	100	100	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	100	100	0	0	0
Notes:Losing effectiveness of coating - 11/7/2019										
235/1:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	128	97	124	3	4	0	0	0	0
1170/2:Split/Delamination (Timber)	ft	4	0	0	100	4	0	0	0	0
Notes:Sw top trail is split - 11/7/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 1 Poor sight distance from east due to vertical curve. Cracks propagating from a few holes on exterior beams where bridge rails are mounted. SW corner of beam has some cracking with efflorsense visible. - 11/7/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-118-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	CROMWELL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 7 SOUTH OF REGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 03' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 34' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	380006.8 5212269.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 35 64 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 39 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	4 Tolerable
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 18, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 04/26/2017
49 Structure Length	25.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	07/03/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, inspector1
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 08-118-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	207	100	207	0	0	0	0	0	0
206/3:Timber Column	each	10	0	0	60	6	40	4	0	0
1140/3:Decay/Section Loss	each	6	0	0	100	6	0	0	0	0
Notes:4 pile on north abutment showing decay\section loss, and 2 on south abutment - 11/18/2019										
1160/3:Crack (Timber)	each	4	0	0	0	0	100	4	0	0
Notes:1 column on north abutment cracking at water line and 3 on south abutment have cracking as well - 11/18/2019										
216/3:Timber Abutment	ft	52	0	0	92	48	8	4	0	0
1140/3:Decay/Section Loss	ft	48	0	0	100	48	0	0	0	0
Notes:Both abutments showing signs of decay and section loss - 11/18/2019										
7000/3:Damage	ft	4	0	0	0	0	100	4	0	0
Notes:Sw corner of south abutment has damage do to ice - 11/18/2019										
235/1:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	33	97	32	3	1	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Nw corner curb has spall - 11/18/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/17/18- NW CORNER OF ABUTMENT HAS BROKEN PLANK.NO BRIDGE RAIL. ICE DAMAGE TO WEST ENDS OF BOTH ABUTS.EAST CURB SPALLED. NW PILING ON NORTH ABUTMENT HAS MINOR ICE DAMAGE.PILING HAVE SOME STAINING AT WATER LINE .No movement visible. North backwall appears to have have been built that way, but is leaning back 4" in 4'. 1 colum N abutment has crack at waterline. - 11/18/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-118-34.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	25.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	GIBBS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	APPLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1NORTH 3WEST OF MENOKEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 17.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 35' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	378586.9 5188405.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	3 Serious
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	2 Concrete Continuous	Load Rating and Posting	
		31 Design Load	
45 No. Spans in Main Unit	1	M 9 (H 10) (live load for which structure was designated)	
46 No. Approach Spans	2	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 4 8 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 3 6 Tons
208 Dk Overburden	1 None	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	08 Tons
27 Yr Built	1903 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	2 Intolerable - Replace
	5 Waterway - Under	68 Deck Geometry	3 Intolerable - Correct
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	1 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	3 Intolerable - Correct
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	November 22, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	Y 24 12/18/2018
47 Total Horizontal Clearance	16.7 Ft.	Underwater	N
48 Length of Max Span	64 Ft.	Other Special	N
49 Structure Length	105.97 Ft.	218 Channel Profile	1 48 06/04/2019
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	16.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Mertz, Dockter
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 08-118-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,076	0	0	100	1,076	0	0	0	0
1180/1:Abrasion	sq.ft	1,076	0	0	100	1,076	0	0	0	0
113/2:Steel Stringer	ft	456	0	0	0	0	100	456	0	0
1000/2:Corrosion	ft	456	0	0	0	0	100	456	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
120/2:Steel Truss	ft	131	0	0	88	115	12	16	0	0
1000/2:Corrosion	ft	115	0	0	100	115	0	0	0	0
1010/2:Cracking	ft	16	0	0	0	0	100	16	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
152/2:Steel Floor Beam	ft	72	0	0	100	72	0	0	0	0
1000/2:Corrosion	ft	72	0	0	100	72	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
210/2:Re Conc Pier Wall	ft	36	81	29	19	7	0	0	0	0
1130/2:Cracking (RC and Other)	ft	7	0	0	100	7	0	0	0	0
215/2:Re Conc Abutment	ft	36	92	33	8	3	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
321/1:Re Conc Approach Slab	sq.ft	999	100	999	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	203	0	0	100	203	0	0	0	0
1000/2:Corrosion	ft	203	0	0	100	203	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/18/18- NO END MARKERS. STEEL OF TRUSS HAS MODERATE RUST. POOR ROAD ALIGNMENT DUE TO HORIZONTAL CURVES. SOME PACK RUST AT U3 BOTH SIDES OF TOP CHORD. Debris under bridge west side next to abutment. - 11/22/2019

Alert Code 1: Chords failed between 11 and 12 north truss. Frontage road that accesses bridge is impassable. Have to access bridge through private property of farmer's field. - 11/22/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-118-35.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Major Collector
04 City	GIBBS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00836 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	APPLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST OF MENOKEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.500	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 35' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	378605.8 5186767.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	91 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	55 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	35 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1969 106 Yr Reconstructed -1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	745 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	1 1 1 1
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 19, 2019
32 Approach Roadway Width	35 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	32.2 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 06/04/2019
49 Structure Length	96.13 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/05/2018
51 Bridge Rdwy Width - Curb to Curb	32.5 Ft.	213 Federal Aid Project Number	CER-0836(53)
52 Deck Width	36.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, McCloud
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-118-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	3,541	100	3,541	0	0	0	0	0	0
510/2:Wearing Surfaces	sq.ft	329	100	329	0	0	0	0	0	0
110/2:Re Conc Opn Girder/Beam	ft	384	99	380	1	4	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
210/3:Re Conc Pier Wall	ft	75	93	70	7	5	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
215/2:Re Conc Abutment	ft	75	93	70	7	5	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
331/2:Re Conc Bridge Railing	ft	194	100	194	0	0	0	0	0	0
333/2:Other Bridge Railing	ft	194	100	194	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/16/18- SOUTH CURB CHIPPED AT WEST END. VERTICAL CRACK WEST ABUT. SOUTH SIDE, HAIRLINE. A 2' X 2' SPALL WEST ABUTMENT NEAR THE GROUNDLINE. 11/19/2019: No Changes - 11/19/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-119-02.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Major Collector
04 City	STEIBER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00819 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MCCLUSKY CANAL R3-1	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 11 NORTH OF REGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	22.995	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 18' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 33' 37.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	382088.7 5241491.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 27 50 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 16 30 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1973 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	55 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	29 Ft.	90 Date of Last Inspection	November 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	52 Ft.	Other Special	N
49 Structure Length	107.94 Ft.	218 Channel Profile	1 48 05/23/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/08/2017
52 Deck Width	32.8 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-119-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	3,025	100	3,025	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	433	100	433	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	33	0	0	100	33	0	0	0	0
1130/3:Cracking (RC and Other)	ft	33	0	0	100	33	0	0	0	0
Notes:Note says vertical hairline crack but unable to take pic do to high water - 11/7/2019										
215/2:Re Conc Abutment	ft	66	91	60	9	6	0	0	0	0
1130/2:Cracking (RC and Other)	ft	6	0	0	100	6	0	0	0	0
Notes:North abut has cracking and 3 popouts - 11/7/2019										
302/2:Compressn Joint Seal	ft	89	0	0	100	89	0	0	0	0
2320/2:Seal Adhesion	ft	89	0	0	100	89	0	0	0	0
Notes:Seals are compressed do to movement - 11/7/2019										
311/2:Moveable Bearing	each	8	0	0	100	8	0	0	0	0
2210/2:Movement	each	8	0	0	100	8	0	0	0	0
Notes:Bearing bolts are bent to to movement - 11/7/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Bearings are starting to lose sum effectiveness - 11/7/2019										
313/2:Fixed Bearing	each	8	100	8	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Starting to lose some coating effectiveness - 11/7/2019										
331/1:Re Conc Bridge Railing	ft	217	99	215	0	0	1	2	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
Notes:SW bridge rail post spalled - 11/7/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: All rubber joint seals totally compressed. SW bridge rail post has a large spall. One vertical hairline crack in the middle of pier 2. Swedge bolts on all bearing are bent from movement of beams. No other movement visible. Some minor cracking in both abutments. SW bridge end marker laying down beside bridge - 11/7/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-119-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	87.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	CROMWELL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	APPLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 8 SOUTH OF REGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 02' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 33' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	381573.4 5210488.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 28 50 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 30 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT 2019	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	3 SC - Unstable
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	November 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.2 Ft.	Underwater	N
48 Length of Max Span	27 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	1 48 06/13/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	30.5 Ft.	212 Structure Load Rated	01/08/2018
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	CP-838(79)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Demaree
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-119-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	299	97	290	2	6	1	3	0	0
1080/1:Delamination/Spall/Patched Area	ft	9	0	0	67	6	33	3	0	0
Notes:outside west beam has spalled section ruffly 4' and another spall smaller one same beam - 11/18/2019										
206/3:Timber Column	each	10	100	10	0	0	0	0	0	0
216/3:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	59	100	59	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	59	100	59	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: OUTSIDE WEST BEAM SPALLED 4FT. ALSO SIX RADOM 6" SPALLS ON OTHER BEAMS. FENCE ACROSS EAST OPENING. Swedge bolts - 11/18/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-119-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	FRANCES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 8 NORTH MENOKEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 34' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	380108.1 5199587.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 34 61 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 37 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	26 Gravel/Dir	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 14, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.3 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 06/12/2019
49 Structure Length	25.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	07/03/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Mertz, Dockter
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-119-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	207	100	207	0	0	0	0	0	0
206/2:Timber Column	each	10	100	10	0	0	0	0	0	0
216/2:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	52	94	49	0	0	6	3	0	0
1090/2:Exposed Rebar	ft	3	0	0	0	0	100	3	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NO BRIDGE RAIL NE & SW CORNERS OF CURB CHIPPED WITH STEEL EXPOSED. POOR ROADWAY ALIGNMENT FROM WEST DUE TO VERTICAL & HORIZONTAL CURVES. BOTH ABUTMENT APPEAR TO BOW EAST BUT DO NOT SHOW ANY MOVEMENT. 1' X 1' spall on west open girder behind cap S1 girder. NW end marker missing - 11/14/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-120-05.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Major Collector
04 City	STEIBER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00819 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 7 NORTH OF REGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	18.996	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 15' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 33' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	382102.6 5234835.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 35 63 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 38 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1961 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	55 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	0.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 04, 2018
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 04/26/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	07/03/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 08-120-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	292	100	292	0	0	0	0	0	0
206/3:Timber Column	each	10	50	5	50	5	0	0	0	0
7000/3:Damage	each	5	0	0	100	5	0	0	0	0
216/3:Timber Abutment	ft	59	73	43	27	16	0	0	0	0
7000/3:Damage	ft	16	0	0	100	16	0	0	0	0
235/1:Timber Pier Cap	ft	59	66	39	0	0	34	20	0	0
7000/1:Damage	ft	20	0	0	0	0	100	20	0	0
331/2:Re Conc Bridge Railing	ft	49	98	48	2	1	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
1140/2:Decay/Section Loss	each	1	0	0	100	1	0	0	0	0

Remarks: 12/04/18- No bridgerail. Road alignment from south poor due to curve. South abut. East side very minor fire damage, 20' of south cap has minor fire damage 1/4" section loss. North cap is ok. Inslopes behind west wings are eroding. 2' deep hole behind NW wing where wing meets abutment, Top board of SE wing broke. 10"x5"x1" spall on west curb. .

Alert Code 1: 12/04/18: 1' X 1' x 2' scour holes behind connections of parapets and NW & SE wings

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-120-21.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Major Collector
04 City	CROMWELL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00822 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	APPLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 SOUTH OF REGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	11.298	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 01' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 33' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	382038.6 5209236.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	47 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	28 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1967 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	50 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	0.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 18, 2019
32 Approach Roadway Width	25 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	33 Ft.	218 Channel Profile	Y 48 06/17/2015
49 Structure Length	37.07 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/08/2018
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Demaree
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 08-120-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	295	97	287	0	0	3	8	0	0
1090/2:Exposed Rebar	ft	8	0	0	0	0	100	8	0	0
Notes:s3 beam spalling and outside south beam spalling both have steel exposed and no section loss - 11/18/2019										
206/3:Timber Column	each	12	17	2	42	5	25	3	17	2
1160/3:Crack (Timber)	each	5	0	0	0	0	60	3	40	2
Notes:2 column on south abutment are broke 2 new pile placed beside those two, east abutment has 3 column starting to crack near water line - 11/18/2019										
1180/3:Abrasion	each	5	0	0	100	5	0	0	0	0
216/3:Timber Abutment	ft	59	0	0	93	55	7	4	0	0
1180/3:Abrasion	ft	55	0	0	100	55	0	0	0	0
Notes:abrasion and wear happening on both abutments - 11/18/2019										
1900/3:Distortion	ft	4	0	0	0	0	100	4	0	0
Notes:distortion taking place east abutment leaning - 11/18/2019										
235/1:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	75	96	72	0	0	4	3	0	0
1080/2:Delamination/Spall/Patched Area	ft	3	0	0	0	0	100	3	0	0
Notes:NE corner curb spalled off rebar exposed no section loss, NW curb tip broke off as well - 11/18/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NO BRIDGE RAIL. NE CORNER OF CURB BROKEN. A 1' X 8" SPALL ON BEAM S3, REBAR EXPOSED, NO SECTION LOSS MEASURED, south outside beam has some spall taking place 1'x3" and 4"x3". 2 pile on west side are broke, 2 new pile have been placed along side of them, 3 pile on east abutment starting to crack near water line, 1" of gravel overburden. - 11/18/2019

Alert Code 1: East abutment leaning 3.2" in 4'. NE & SW corner where wing and backwall meet have some fill being lost. NE backwall is leaning and caused an area to lose fill. - 11/18/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-121-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	STEIBER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH OF REGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 14' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 31' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	383997.1 5233403.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 34 62 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 38 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.5 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	1 48 04/26/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	30.8 Ft.	212 Structure Load Rated	07/03/2017
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-121-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	250	100	250	0	0	0	0	0	0
206/3:Timber Column	each	10	100	10	0	0	0	0	0	0
216/3:Timber Abutment	ft	68	0	0	100	68	0	0	0	0
1900/3:Distortion	ft	68	0	0	100	68	0	0	0	0
Notes:East abutment leaning inward. West abutment leaning back. - 11/7/2019										
235/1:Timber Pier Cap	ft	68	100	68	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	50	100	50	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	54	100	54	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Abutment wall leaning in 6" in 4'. W abut leans out 8" in 4' on south side and 4" in 4' on the north side for an average of 6" in 4'. E abut leans slightly. - 11/7/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-121-33.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	MENOKEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	APPLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH OF MENOKEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 32' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	382535.3 5190027.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 26 47 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	32 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1969 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	90 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 19, 2019
32 Approach Roadway Width	29 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	29.2 Ft.	Other Special	N
48 Length of Max Span	69 Ft.	218 Channel Profile	1 48 06/04/2019
49 Structure Length	71.85 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/08/2018
51 Bridge Rdwy Width - Curb to Curb	29.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	31.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-121-33.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	791	100	791	0	0	0	0	0	0
206/3:Timber Column	each	18	100	18	0	0	0	0	0	0
216/3:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	144	100	144	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/18/18- POOR CHANNEL ALIGNMENT DOWNSTREAM. OLD H PILE MEMBERS IN CHANNEL. Debris caught on old H pile restricting channel. 1.5'x1.5'x1.5' erosion hole @ NW corner of bridge on top. 11/10/2019: No Changes - 11/19/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-121-34.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	MENOKEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	APPLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 2 NORTH OF MENOKEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 31' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	384086.0 5189459.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 60 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 36 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	54 Ft.	Other Special	N
49 Structure Length	56.10 Ft.	218 Channel Profile	1 48 06/04/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/08/2018
52 Deck Width	30.2 Ft.	213 Federal Aid Project Number	CAP-0822(86)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, McCloud
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-121-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	561	100	561	0	0	0	0	0	0
206/2:Timber Column	each	14	93	13	7	1	0	0	0	0
7000/2:Damage	each	1	0	0	100	1	0	0	0	0
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	112	100	112	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	112	96	108	4	4	0	0	0	0
1170/2:Split/Delamination (Timber)	ft	4	0	0	100	4	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/18/18- POOR CHANNEL ALIGNMENT. ICE SCRAPES ON 2 PILE South BACKWALL. 2 PLANKS ON THE SW CORNER OF SOUTH BACKWALL HAVE ICE DAMAGE. 2 small spalls on beam E @ the SE corner of beam. Bridge rail NW corner has 4' damage. 11/19/2019: No Changes - 11/19/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-122-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	FRANCES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect /EST BRANCH APPLE CREEK		102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 10 NORTH MENOKEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 58' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 29' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	386142.8 5203360.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 29 53 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1980 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	10 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 14, 2019
32 Approach Roadway Width	28 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	30.5 Ft.	Other Special	N
48 Length of Max Span	35 Ft.	218 Channel Profile	1 48 06/13/2019
49 Structure Length	86.94 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.3 Ft Lt-Side	212 Structure Load Rated	01/09/2018
51 Bridge Rdwy Width - Curb to Curb	30.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Mertz, Dockter
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 08-122-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	869	99	858	1	10	0	1	0	0
1080/1:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
1090/1:Exposed Rebar	ft	1	0	0	0	0	100	1	0	0
202/1:Steel Column	each	11	100	11	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
206/3:Timber Column	each	19	0	0	84	16	16	3	0	0
1180/3:Abrasion	each	16	0	0	100	16	0	0	0	0
7000/3:Damage	each	3	0	0	0	0	100	3	0	0
219/3:Stl Abutment	ft	66	100	66	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	128	100	128	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	174	99	173	1	1	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
332/2:Timb Bridge Railing	ft	174	100	174	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
7000/2:Damage	each	1	0	0	100	1	0	0	0	0

Remarks: 12/18/18- SMALL 6" SPALLS WITH STEEL EXPOSED ON BEAM FLANGES. ICE DAMAGE ON SOUTH ABUT VERY MINOR. SOME STAINING ON WOOD PILING AT WATERLINE. W1 & W2 TIMBER COLUMN HAVE MINOR ICE DAMAGE ON SOUTH ABUTMENT. SW wing ice damage, 10 spalls on top box girdier - 11/14/2019

Alert Code 1: West Rail missing one post on rail. - 11/14/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-123-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	ROCK HILL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 6 SOUTH OF REGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 04' 60.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 28' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	388077.6 5215471.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 35 64 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 39 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1964 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	35 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 18, 2019
32 Approach Roadway Width	25 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 06/13/2019
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	07/03/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, inspector1
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 08-123-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	200	100	200	0	0	0	0	0	0
206/3:Timber Column	each	10	0	0	100	10	0	0	0	0
1180/3:Abrasion	each	10	0	0	100	10	0	0	0	0
Notes:all columns showing abrasion/wear - 11/18/2019										
216/3:Timber Abutment	ft	56	0	0	100	56	0	0	0	0
1180/3:Abrasion	ft	56	0	0	100	56	0	0	0	0
Notes:both abutments show abrasion wear - 11/18/2019										
235/2:Timber Pier Cap	ft	56	0	0	100	56	0	0	0	0
1150/2:Check/Shake	ft	56	0	0	100	56	0	0	0	0
Notes:both pier caps have some checking taking place - 11/18/2019										
331/2:Re Conc Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
1180/2:Abrasion	each	4	0	0	100	4	0	0	0	0
Notes:all 4 wings are showing wear - 11/18/2019										

Remarks: NO BRIDGE RAIL SOME DECAY IS EVIDENT ON PILING AT WATER LINE, NO SECTION LOSS YET., NBI rating for the deck shows condition 4 poor unable to rate deck do to gravel overburden. - 11/18/2019

Alert Code 1: Scour 10 ft long X 5 ft wide X 2 ft deep at NE corner. 6"x6" hole forming in middle of road behind south abutment on top fill being lost - 11/18/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-123-34.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	MENOKEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LONG LAKE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 NORTH MENOKEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 29' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	386530.3 5188825.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1994 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	December 18, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-8(12)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X10X48' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-123-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	95	98	93	2	2	0	0	0	0
1090/3:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/2:Headwalls	each	1	100	1	0	0	0	0	0	0

Remarks: 12/18/18: SOME HAIRLINE CRACKS ON WINGS. MINOR. A 2' X 1' SPALL ON NW WALL WHERE THE WING AND WALL MEET. Rebar exposed with sum section loss. SW wing has minor spall with exposed rebar no section loss. SE wing has small spall with exposed rebar where wing meets box.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-124-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	TRYGG TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 11 NORTH MCKENZIE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 58' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 27' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	388663.9 5204240.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 34 62 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 38 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 14, 2019
32 Approach Roadway Width	23 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.3 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 06/13/2019
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	07/03/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Mertz, Dockter
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 08-124-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	200	91	181	10	19	0	0	0	0
1090/1:Exposed Rebar	ft	19	0	0	100	19	0	0	0	0
206/3:Timber Column	each	10	80	8	20	2	0	0	0	0
1180/3:Abrasion	each	2	0	0	100	2	0	0	0	0
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/18/18- NO BRIDGERAIL. POOR SIGHT DISTANCE FROM WEST DUE TO VERT- ICAL CURVE. FENCES ACROSS south OPENINGS UNDER STRUCTURE. 2ND BEAM FROM SOUTH NOW HAS 10' OF EXPOSED STEEL REBAR, THE 2ND BEAM FROM NORTH HAS 9' OF STEEL REBAR EXPOSED, NO SECTION LOSS MEASURED. Some Staining at waterline on all piling. - 11/14/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-126-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	SIBLEY BUTTE TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	APPLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 5 NORTH MCKENZIE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 26' 07.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	390674.3 5194446.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	November 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X8X90 SPP ELLIPSE		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-126-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	180	100	180	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/3:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8399/3:Slope Protection, RC	each	2	100	2	0	0	0	0	0	0
8402/3:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: 12/18/18- Holes on top of pipes have been repaired. Floor of pipes have light rusting and crrosion. Cattail build up ruffly 1.5' up from inv of east end of pipe both barrels 11/19/2019: Unable to get pictures due to high flowing water in pipe. - 11/19/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-126-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Major Collector
04 City	MCKENZIE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH OF MCKENZIE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.800	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 24' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	392069.0 5186883.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	200 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	31 Ft.	90 Date of Last Inspection	December 26, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	36.1 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CP08
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X5X37' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-126-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
332/2:Timb Bridge Railing	ft	49	100	49	0	0	0	0	0	0
841/3:Re Conc Culvert Precast	ft	75	100	75	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/26/18- SCOUR WEST END OF BOX, 2' DEEP 28' WIDE 15' LONG. UNDERMINED 2' BUT APPRON HAS A SHEET PILING ROW UNDER AND CANNOT UNDER- MINE ANY FURTHER. Minor erosion behind SW wing near bottom.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-126-39.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Major Collector
04 City	LOGAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00842 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LONG LAKE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH MCKENZIE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	12.897	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 45' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 25' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	391751.1 5179991.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	November 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	35.8 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	22.97 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, McCloud
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10'X7'X36' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-126-39.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	72	100	72	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	46	100	46	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/26/18- CRACKING ALL FOUR WALLS WHERE ROOF MEETS TOP WALL, ENTIRE LENGTH. CRACKS ARE HAIRLINE. Culvert shows staining throughout with minor cracking and efflorescence. 11/20/2019: No Changes - 11/20/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-127-30.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Major Collector
04 City	SIBLEY BUTTE TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00827 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	APPLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 6 NORTH MCKENZIE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.799	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 23' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	393937.1 5195971.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2008 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	38 Ft.	90 Date of Last Inspection	December 18, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	37.7 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14'X 10'X 50' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-127-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	98	100	98	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/1:Headwalls	each	58	100	58	0	0	0	0	0	0

Remarks: 12/18/18- East headwall is slightly misaligned but joints inside of box are ok. NW,SW,SE wings are separates from the box 1" gap. A few small spalls on top of west headwall and NW wing.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-127-34.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Major Collector
04 City	MCKENZIE TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00827 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST OF ND 14	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.700	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 23' 60.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	393252.2 5188013.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1965 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	200 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	December 18, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	41.99 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	I-5-094()169
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUADRUPLE, 6X10X34' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 08-127-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	135	50	67	48	65	2	3	0	0
1080/3:Delamination/Spall/Patched Area	ft	68	0	0	96	65	4	3	0	0
Notes: _										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes: _										
8402/2:Headwalls	each	2	0	0	100	2	0	0	0	0
1130/2:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
Notes: _										

Remarks: 12/18/18- ALL PARAPETS ARE CRACKED WHERE WINGS AND PARAPETS MEET. VERTICAL CRACKS IN ALL WALLS. Minor spalls on SE & NE corners where headwalls & exterior walls meet. Banks & channel are heavily vegetated.

Alert Code 1: Longitudinal cracks where wall meets roof. 12/18/18: NW & SW corners have a major crack on both of them where wings and headwalls meet. Each are 1/4" to 3/8" wide & extend down into the exterior walls 1 ft diagonally. NW corner on headwall has a 6" spall with 3" of #7 rebar exposed. No measureable section loss. 12/18/18- Crack at NW corner is now 1.5" wide and 6" long.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-128-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	TRYGG TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 6 SOUTH OF WING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 03' 17.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 22' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	395216.8 5212166.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 32 58 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 35 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 05, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.6 Ft.	Other Special	N
48 Length of Max Span	33 Ft.	218 Channel Profile	1 48 06/18/2019
49 Structure Length	36.09 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	03/26/2018
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-128-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	289	97	279	4	10	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
Notes: _										
215/3:Re Conc Abutment	ft	52	0	0	100	52	0	0	0	0
1130/3:Cracking (RC and Other)	ft	52	0	0	100	52	0	0	0	0
Notes: _										
331/2:Re Conc Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/05/18- SPALL ON 2ND & 3RD BEAM FROM SOUTH. STEEL EXPOSED BUT NO SECTION LOSS VISIBLE.

Alert Code 1: 12/05/18: Minor erosion behind ne wing.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-128-20.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	88.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Major Collector
04 City	TRYGG TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00822 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 7 SOUTH OF WING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	22.795	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 02' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 22' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	395737.8 5210539.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	41 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	26 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1986 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	40 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	0.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 05, 2018
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 06/18/2019
49 Structure Length	33.14 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/09/2018
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-128-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	331	0	0	100	331	0	0	0	0
1130/2:Cracking (RC and Other)	ft	331	0	0	100	331	0	0	0	0
Notes: _										
206/3:Timber Column	each	10	100	10	0	0	0	0	0	0
216/3:Timber Abutment	ft	59	0	0	100	59	0	0	0	0
1180/3:Abrasion	ft	59	0	0	100	59	0	0	0	0
Notes: _										
235/2:Timber Pier Cap	ft	59	0	0	100	59	0	0	0	0
1180/2:Abrasion	ft	59	0	0	100	59	0	0	0	0
Notes: _										
331/2:Re Conc Bridge Railing	ft	66	100	66	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	66	97	64	3	2	0	0	0	0
7000/2:Damage	ft	2	0	0	100	2	0	0	0	0
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
1180/2:Abrasion	each	4	0	0	100	4	0	0	0	0

Remarks: 12/05/18- NOTE: CRACKED BOX BEAMS REPAIR AREAS SHOW NO SIGN OF FAILURE AT THIS TIME. NE bridge rail broke do to vehicle impact.

Alert Code 1: Box beam spalling on top of abutment cap. two box beams have cracks that have been repaired.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-129-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 8 SOUTH OF WING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 01' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 20' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	397627.3 5209102.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 44 79 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 26 48 Tons
208 Dk Overburden	202 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	December 05, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.2 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	32.15 Ft.	218 Channel Profile	1 48 06/18/2019
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	07/03/2017
	30.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-129-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	322	0	0	95	306	5	16	0	0
1090/2:Exposed Rebar	ft	322	0	0	95	306	5	16	0	0
202/3:Steel Column	each	3	100	3	0	0	0	0	0	0
Notes:_										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
Notes:_										
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:_										
206/3:Timber Column	each	7	100	7	0	0	0	0	0	0
216/2:Timber Abutment	ft	66	99	65	2	1	0	0	0	0
7000/2:Damage	ft	1	0	0	100	1	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	66	100	66	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	66	100	66	0	0	0	0	0	0
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
1140/2:Decay/Section Loss	each	4	0	0	100	4	0	0	0	0

Remarks: 12/05/18- CHANNEL BEAMS ARE FACTORY SECONDS WITH 16 LF OF HONEYCOMB THAT HAS EXPOSED REBAR NO CORROSION EVIDENT.

Alert Code 1: 12/05/18: Minor erosion around all wings.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-130-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	SIBLEY BUTTE TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	APPLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 NORTH 2 WEST STERLING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 20' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	398281.4 5200802.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 44 80 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 47 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1978 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	November 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	49 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 06/12/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/09/2018
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	CP-0806(79)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, McCloud
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 08-130-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	351	100	351	0	0	0	0	0	0
206/3:Timber Column	each	14	79	11	14	2	7	1	0	0
1140/3:Decay/Section Loss	each	1	0	0	0	0	100	1	0	0
1180/3:Abrasion	each	2	0	0	100	2	0	0	0	0
216/3:Timber Abutment	ft	56	0	0	100	56	0	0	0	0
1900/3:Distortion	ft	56	0	0	100	56	0	0	0	0
235/1:Timber Pier Cap	ft	56	0	0	95	53	5	3	0	0
1170/1:Split/Delamination (Timber)	ft	3	0	0	0	0	100	3	0	0
1180/1:Abrasion	ft	53	0	0	100	53	0	0	0	0
330/2:Metal Bridge Railing	ft	98	100	98	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/18/18- PILE ALIGNMENT BEAM WEST ABUTMENT HAS NORTH END OF IT BENT. TWO PILE OF EAST BACKWALL HAVE SOME MINOR ICE DAMAGE. PILING ALL ARE STARTING TO SHOW SOME STAINING AT WATERLINE. NE end of timber pier cap has 3' crack @ end 11/20/2019: 4" x 1' spall @ NW Corner of Girder N. - 11/20/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-131-20.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00822 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	APPLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 7 SOUTH OF WING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	25.395	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 02' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 18' 60.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	399984.0 5210452.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 32 59 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 35 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	24 Gravel/Dir	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	40 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	0.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	8 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 19, 2019
32 Approach Roadway Width	27 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 06/18/2019
49 Structure Length	25.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	07/03/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, inspector1, inspector2
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-131-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	207	100	207	0	0	0	0	0	0
206/3:Timber Column	each	10	100	10	0	0	0	0	0	0
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	52	98	51	2	1	0	0	0	0
7000/2:Damage	ft	1	0	0	100	1	0	0	0	0
Notes:NE corner curb broke do to damage exposed rebar with no section loss - 11/19/2019										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1180/3:Abrasion	each	4	0	0	100	4	0	0	0	0
Notes:All 4 wings showing signs of wear - 11/19/2019										

Remarks: NO BRIDGE RAIL. Timber piling have staining at waterline. - 11/19/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-135-47.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Local
04 City	LONG LAKE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LONG LAKE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 2 SOUTH OF MOFFIT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 41' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 11' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	405198.9 5166828.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 39 70 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 23 42 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 1 0 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	November 11, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	64 Ft.	Other Special	N
49 Structure Length	67.91 Ft.	218 Channel Profile	1 48 05/23/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/09/2018
52 Deck Width	30.2 Ft.	213 Federal Aid Project Number	BRO-8(11)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, McCloud
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-135-47.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	679	99	669	2	10	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
215/3:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	135	100	135	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0

Remarks: 12/17/18- Small diagonal cracks where wings meet abuts. 11/20/2019: No Changes Unable to get pictures of the spalls due to high water. - 11/11/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-137-44.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Rural, Major Collector
04 City	WILD ROSE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	08480 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LONG LAKE	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 5 EAST OF MOFFIT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	18.296	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	409308.6 5171584.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	5	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2001 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	14 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	December 17, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	55.8 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	56.10 Ft.	218 Channel Profile	– -1 01/01/1901
50 Curb/Sidewalk Widths	2.6 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	G LAKE NATL WILDLIFE REFUGE
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUINT, 10X6X64' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 08-137-44.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	270	100	270	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	50	2	0	0	50	2	0	0

Remarks: Water to top of structure. Unable to inspect inside of box. structure. 02/2013: No changes. 06/01/15; Unable to inspect inside of box water to top of structure. 12/17/18- Unable to inspect inside of box water is 1.5' from top of box and unable to see why 2 wings are in st3

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: BISM01 B

200 System Designation	4 - Urban	Classification	
201 Status		12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	-2.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Bismarck District	22 Owner	City/Municipal Hwy Agenc
03 County	Burleigh	26 Functional	Urban, Minor Arterial
04 City	BISMARCK CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	One Route Under	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08142 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect 3NSF MAINLINE UNDERPASS		102 Direction of Traffic	2 2-way traffic
09 Location WASHINGTON ST BISMARCK		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.329	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 47' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 363094.9 5185096.8		Condition	
98 Border Bridge Not Applicable (P) 0.00 %		58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	
Structure Type and Material		60 Substructure	
43 Main Struct Type :stressed concrete continuous		61 Chan. & Chan. Protection	
Stringer		62 Culvert and Retaining Walls	
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	-1		Railroad (live load for which structure was designated)
46 No. Approach Spans	-1	41 Structure Open, Closed or Posted	Unknown (NBI)
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	Unknown (NBI)
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS -1
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	Unknown (NBI)
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS -1
208 Dk Overburden 1	None	70 Bridge Posting	Unknown (NBI)
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built 1993 106 Yr Reconstructed		Appraisal	
42 Type of Service	2 Railroad - On	67 Structural Condition	
	1 Highway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	5	69 Underclear. Vert & Horiz	3 Intolerable - Correct
29 ADT 15,600 30 Year of ADT 2010		71 Waterway Adequacy	
109 Average Daily Truck Traffic	3.00	72 App. Rdwy. Alignment	Unknown (NBI)
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance	16 Ft. 4 In.	Inspections	
32 Approach Roadway Width	65 Ft.	90 Date of Last Inspection	April 02, 2019
33 Bridge Median	Unknown (NBI)	91 Designated Inspection Frequency	24 Months
34 Skew	-1.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpspection Dt	
35 Structure Flared	Unknown (NBI)	Fracture Critical	N
47 Total Horizontal Clearance	66.9 Ft.	Underwater	N
48 Length of Max Span	75 Ft.	Other Special	N
49 Structure Length	190.94 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	-1.0 Ft Rt-Side	Chaining Date	None
	-1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	-1.0 Ft.	213 Federal Aid Project Number	MG-1-981(024)010 SITE 2
53 Min Vert Clear. Over Bridge	-1 Ft. 0 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	16 Ft. 1 In.	216 Inspector	Kerzman, Nehls
	H Hwy beneath struct	Navigation Data	
55 Min Lateral UnderClear. - Rt	3.6 Ft.	38 Navigation Control	Unknown (NBI)
	H Hwy beneath struct	39 Navigation Vertical Clearance	-1 Ft.
56 Min Lateral UnderClear. - Lt	327.8 Ft.	40 Navigation Horizontal Clearance	-1 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: BISM01 B

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	745	99	740	1	5	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
Notes:Minor cracking on outside girders at pier locations - 4/2/2019										
205/1:Re Conc Column	each	4	100	4	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	40	100	40	0	0	0	0	0	0
234/1:Re Conc Pier Cap	ft	30	93	28	7	2	0	0	0	0
1130/1:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
Notes:Minor cracking on pier cap - 4/2/2019										
310/1:Elastomeric Bearing	each	12	100	12	0	0	0	0	0	0
313/1:Fixed Bearing	each	12	100	12	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
8399/1:Slope Protection, RC	each	2	100	2	0	0	0	0	0	0

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: BISM02

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Urban, Local
04 City	BISMARCK CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HAY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location 1 EAST 1 NORTH BISMARCK		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 45' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 365765.5 5190287.7		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1981 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 2,225 30 Year of ADT 2019		71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	3.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	April 02, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-8(7)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kerzman, Nehls
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 8X8X65' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: BISM02

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	194	95	184	5	10	0	0	0	0
1130/3:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:Minor Cracks (hairline) in all walls. - 4/2/2019										
8401/3:Wings	each	4	25	1	75	3	0	0	0	0
1130/3:Cracking (RC and Other)	each	3	0	0	100	3	0	0	0	0
Notes:NE, SE, & SW wings have hairline cracks and effloresce is visible. - 4/2/2019										
8402/1:Headwalls	each	2	50	1	50	1	0	0	0	0
1090/1:Exposed Rebar	each	2	50	1	50	1	0	0	0	0
Notes:One foot spall on SE headwall where the wing meets box. Rebar exposed with no section loss - 4/2/2019										

Remarks: NBI Remarks: NE,SE and SW wings have minor hairline cracks. Cracks and spalling on all corners where wings and parapets meet, se corner was a 1' square spall with 1 rebar exposed no section loss measurable. Minor cracks (hairline) in all walls. Conduit running through east box. North parapet cracked and 2nd post from east on chainlink fence is raised 4". - 4/2/2019

Alert Code 1: Cattails and brush in channel on south side and north side has large tree which is catching debris. chain-link fence on south side has been removed. There is settlement on the north side along both sides of box which is a safety issue if car runs into it. - 4/2/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: BISM03

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Bismarck District	22 Owner	City/Municipal Hwy Agenc
03 County	Burleigh	26 Functional	Urban, Minor Arterial
04 City	BISMARCK CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08123 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HAY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	ON EAST CENTURY AVENUE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.850	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 45' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 366392.5 5188654.9		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type :stressed concrete continuous		61 Chan. & Chan. Protection	9 No Deficiencies
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type 1 Concrete-Cast-in-Place		63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface 1 Monolithic Concrete		64 Oper. Rating HS 55	99 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect 1 Epoxy Coated Reinforci		66 Inv. Rating HS 24	45 Tons
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 2007 106 Yr Reconstructed		Appraisal	
42 Type of Service 1 Highway - On		67 Structural Condition	8 Equal Desirable Crit
7 Railroad-waterway - Under		68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure 4		69 Underclear. Vert & Horiz	9 Above Desirable
29 ADT 6,600 30 Year of ADT 2019		71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic 1.00		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length 2 Miles		36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance 99 Ft. 12 In.		Inspections	
32 Approach Roadway Width 60 Ft.		90 Date of Last Inspection	April 08, 2019
33 Bridge Median 0 No median		91 Designated Inspection Frequency	24 Months
34 Skew 23.00		92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
35 Structure Flared 0 No flare		Fracture Critical N	
47 Total Horizontal Clearance 55.8 Ft.		Underwater N	
48 Length of Max Span 106 Ft.		Other Special N	
49 Structure Length 211.94 Ft.		218 Channel Profile 1 48	05/10/2017
50 Curb/Sidewalk Widths 1.0 Ft Rt-Side		Chaining Date	None
15.1 Ft Lt-Side		207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
52 Deck Width 72.2 Ft.		213 Federal Aid Project Number AC-U-CMU-TEU-1-981(073)083	
53 Min Vert Clear. Over Bridge 99 Ft. 12 In.		214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance 23 Ft. 9 In.		216 Inspector	Kerzman, Nehls
R Railroad beneath struc		Navigation Data	
55 Min Lateral UnderClear. - Rt 34.4 Ft.		38 Navigation Control	Permit Not Required
R Railroad beneath struc		39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt 0.0 Ft.		40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: BISM03

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	11,872	100	11,872	0	0	0	0	0	0
520/3:Conc Re Prot Sys	sq.ft	1,103	100	1,103	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	2,020	100	2,020	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	77	100	77	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	165	100	165	0	0	0	0	0	0
321/3:Re Conc Approach Slab	sq.ft	5,482	100	5,452	1	30	0	0	0	0
1080/3:Delamination/Spall/Patched Area	sq.ft	30	0	0	100	30	0	0	0	0
Notes:Spall & patched areas on both west and east approach slabs caused by settlement next to roadway - 4/8/2019										
330/2:Metal Bridge Railing	ft	424	95	404	0	0	5	20	0	0
1900/2:Distortion	ft	20	0	0	0	0	100	20	0	0
Notes:Distortion in all four corners caused by outside retaining wall movement. NE railing broke weld. SE railing held together by chain under tension. - 4/8/2019										
515/2:Steel Protective Coating	sq.ft	100	95	95	5	5	0	0	0	0
3420/2:Peel/Bub/Crack(Stl Protect Co)	sq.ft	5	0	0	100	5	0	0	0	0
Notes:Protective coating peeling off mostly on the outside of railings - 4/8/2019										
331/2:Re Conc Bridge Railing	ft	424	98	414	2	10	0	0	0	0
1130/2:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:Few hairline cracks on concrete throughout the railing. - 4/8/2019										
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Top and bottom of deck has some visible hairline cracks with efflorescence visible on bottom of deck. Spalls on roadway, some patched with asphalt. 1' X 1' X 3' spall on SW corner of sidewalk and retaining wall. Metal railing has paint flaking in numerous spots. Gate damaged on east side. Roadway on the east side has been patched but is still causing ramping onto the bridge. Roadway on the west side has settled and is causing ramping onto bridge. Scour hole on NE & NW corner of retaining wall. Sprayfoam has been added in some spots to try fill some of the voids. - 4/8/2019

Alert Code 1: Retaining walls on both approaches have pulled away 3" to 4" on top. - 4/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: BISM05

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Bismarck District	22 Owner	City/Municipal Hwy Agenc
03 County	Burleigh	26 Functional	Urban, Local
04 City	BISMARCK CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	STORM DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	DENVER AVE. & S. 9TH ST.	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 47' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 46' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	364235.0 5183597.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1969 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	3,400 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	2.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	40 Ft.	90 Date of Last Inspection	April 02, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kerzman, Nehls
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 8X5X683' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: BISM05

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	682	100	680	0	2	0	0	0	0
1130/3:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
Notes:Some Minor hairline cracks in the walls and wings, unable to inspect anything past first 20 feet of box do to length and confined space. - 4/2/2019										
8401/3:Wings	each	2	50	1	50	1	0	0	0	0
1130/3:Cracking (RC and Other)	each	2	50	1	50	1	0	0	0	0
Notes:East wing has cracking with efflorescence visible. - 4/2/2019										

Remarks: SOME MINOR HAIRLINE CRACKS IN WINGS & WALLS. NOT ABLE TO INSPECT ANYTHING EXCEPT THE OUTSIDE ENTRANCE. - 4/2/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: BISM06

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Bismarck District	22 Owner	City/Municipal Hwy Agenc
03 County	Burleigh	26 Functional	Urban, Minor Arterial
04 City	BISMARCK CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08191 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	STORM DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location WACHTER AVE & AIRPORT EXP		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.001	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 47' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 46' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 364270.6 5182731.1		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1969 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 4,450 30 Year of ADT 2019		71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	48 Ft.	90 Date of Last Inspection	April 02, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	47.9 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kerzman, Nehls
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 8X5X67.4' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: BISM06

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	207	90	187	10	20	0	0	0	0
1130/3:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
Notes:Spalls in east barrel 1/3 of the way from south end rebar exposed with no section loss. - 4/2/2019										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1080/3:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes:top corner of SW wing has a spall rebar exposed with no section loss - 4/2/2019										
1130/3:Cracking (RC and Other)	each	3	0	0	100	3	0	0	0	0
Notes:All wings have minor cracking - 4/2/2019										
8402/1:Headwalls	each	2	50	1	50	1	0	0	0	0
1130/1:Cracking (RC and Other)	each	2	50	1	50	1	0	0	0	0
Notes:North Headwall has minor cracking - 4/2/2019										

Remarks: Retaining walls at ends of wings are cracked and pieces broken out. Top corner of sw wing has a spall. 3 spalls in east barrel 1/3 of way from south end rebar exposed no section loss. NE retaining wall is seperated 10" with all rebar exposed, retaining wall is no longer tied to the wing. - 4/2/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: BISM07

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Bismarck District	22 Owner	City/Municipal Hwy Agenc
03 County	Burleigh	26 Functional	Urban, Collector
04 City	BISMARCK CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	08152 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	STORM DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	SOUTH 3RD STREET	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.699	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 46' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 47' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	363953.0 5182442.0	Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1969 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	1,400 30 Year of ADT	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	48 Ft.	90 Date of Last Inspection	April 02, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	47.9 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kerzman, Nehls
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 8X5X67.9' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: BISM07

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	207	90	187	10	20	0	0	0	0
1130/3:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
Notes:Box has minor cracking throughout. - 4/2/2019										
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
1130/3:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
Notes:SW & NE wings have minor cracking. NE wing has small spall with no rebar exposed. - 4/2/2019										
8402/1:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: Wings cracked where they meet walls & headwalls. - 4/2/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: BISM08

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Bismarck District	22 Owner	City/Municipal Hwy Agenc
03 County	Burleigh	26 Functional	Urban, Minor Arterial
04 City	BISMARCK CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08142 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	STORM DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location SOUTH WASHINGTON STREET		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.079	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 46' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 47' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 363007.2 5182319.9		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1969 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 5,900 30 Year of ADT 2019		71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	2.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	52 Ft.	90 Date of Last Inspection	April 02, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	51.8 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kerzman, Nehls
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 8X5X69' RCB STORM DRAIN WITH SHI		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: BISM08

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	207	90	187	10	20	0	0	0	0
1130/3:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
Notes:Minor hairline cracks in the walls throughout - 4/2/2019										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:Minor cracking in all 4 wings - 4/2/2019										
8402/1:Headwalls	each	2	50	1	50	1	0	0	0	0
1190/1:Abrasion(PSC/RC)	each	2	50	1	50	1	0	0	0	0
Notes:East Head wall minor abrasion / wear - 4/2/2019										

Remarks: NW wings have scour at the ends of the wings. Retaining walls at end of wings are cracked and distorted. Box Beam pedestrian bridge on west side of box, also flood protection lowering gate installed on west side. - 4/2/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: BISM09

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Bismarck District	22 Owner	City/Municipal Hwy Agenc
03 County	Burleigh	26 Functional	Urban, Minor Arterial
04 City	BISMARCK CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08155 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HAY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location EAST ROSSER AVE-BISMARCK		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.349	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 47' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 43' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 367677.1 5185408.8		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	5	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1981 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 3,450 30 Year of ADT 2019		71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	3.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	51 Ft.	90 Date of Last Inspection	April 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	63.0 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	42.98 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	13.1 Ft Rt-Side	Chaining Date	None
	9.8 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	HAY CREEK
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kerzman, Wollmuth
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUINTUPLE, 8X7.5X73' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: BISM09

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	361	77	276	20	73	3	12	0	0
1080/2:Delamination/Spall/Patched Area	ft	12	0	0	0	0	100	12	0	0
Notes:ends of box ends have a lot of map cracking and some large 1'x1' spalls with rebar exposed. - 4/3/2019										
1130/2:Cracking (RC and Other)	ft	73	0	0	100	73	0	0	0	0
Notes:Transverse cracking throughout the box - 4/3/2019										
331/2:Re Conc Bridge Railing	ft	85	100	85	0	0	0	0	0	0
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
1130/2:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:All 4 wings have diagonal cracking minor to 1/8" - 4/3/2019										
8402/1:Headwalls	each	2	0	0	100	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	2	0	0	100	2	0	0	0	0
Notes:Both headwalls have numerous 1' x1' spalls in the corners. - 4/3/2019										

Remarks: NBI Remarks: West two barrels are the only ones that flow. Construction joints have been fixed covered with steel plate, along with the fill loss was repaired from top of roadway . - 4/3/2019

Alert Code 1: Three feet of silt & cattails built up in front of three of the five barrels, both ends. headwall cracked where they meet wings, nw & ne corners have steel exposed-no measured section loss. longitudinal cracks on outside walls, no bowing evident. - 4/3/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: BISM10

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Bismarck District	22 Owner	City/Municipal Hwy Agenc
03 County	Burleigh	26 Functional	Urban, Local
04 City	BISMARCK CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	Outlet Channel	102 Direction of Traffic	2 2-way traffic
09 Location	Shoreline Drive	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	0000000000 00	105 Federal Lands Highways	Not applicable
16 Latitude	46d 46' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 49' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	360373.3 5181312.8	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	—	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2010 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	2,010 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	April 02, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	36.0 Ft.	Underwater	N
48 Length of Max Span	98 Ft.	Other Special	N
49 Structure Length	98.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	10.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	36.0 Ft.	212 Structure Load Rated	10/15/2010
52 Deck Width	48.5 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kerzman, Nehls
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	0.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: BISM10

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,508	100	4,508	0	0	0	0	0	0
520/1:Conc Re Prot Sys	sq.ft	419	100	419	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	784	100	784	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	106	100	106	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	244	100	244	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	296	100	296	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0

Alert Code 1: Undermining of SW & NW top of wing and under approach slab/roadway causing ramping on to the structure.
See attached photos. - 4/2/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: BISM11

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Burleigh	26 Functional	Urban, Local
04 City	BISMARCK CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HAY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	NE BISMARCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 45' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	367465.8 5187023.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2014 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	2,225 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	3.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	April 02, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	68.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	46.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	03/14/2018
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	SU-NHU-1-981(094)104
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kerzman, Nehls
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
12' X 9' X 122' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: BISM11

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	366	100	366	0	0	0	0	0	0
8401/1:Wings	each	4	50	2	50	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	2	0	0	100	2	0	0	0	0
Notes:NW & SE wings have small spalls - 4/2/2019										
8402/1:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: Box culvert was built in 2014 - 4/2/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-101-02.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	ROCHESTER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST 4 NORTH OF PAGE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 12' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	599525.9 5229398.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 26 48 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1999 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	June 11, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	53 Ft.	Other Special	N
49 Structure Length	57.09 Ft.	218 Channel Profile	1 48 05/15/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/19/2000
	27.9 Ft.	213 Federal Aid Project Number	BRO-9(18)
52 Deck Width	29.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-101-02.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,679	100	1,679	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	276	100	276	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	115	6	7	94	108	0	0	0	0
7000/1:Damage	ft	108	0	0	100	108	0	0	0	0
Notes:Traffic impact to NE & SE & NW approach guardrail, with 2 broken post at the NW rail and one broken post at the SE rail. - 6/11/2019										
515/1:Steel Protective Coating	sq.ft	100	90	90	10	10	0	0	0	0
7000/1:Damage	sq.ft	10	0	0	100	10	0	0	0	0
Notes:Traffic impact damage - 6/11/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Minor erosion behind wingwalls. - 6/11/2019										

Remarks: Moderate channel vegetation. Minor scour under structure. - 6/11/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-101-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	ROCHESTER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST 4.7 NORTH OF PAGE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 12' 29.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	599579.6 5229135.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	18+Mod (HS 20+Mod) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 24 43 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 17 31 Tons
208 Dk Overburden	31 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	8 Desirable Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 11, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.8 Ft.	Underwater	N
48 Length of Max Span	24 Ft.	Other Special	N
49 Structure Length	68.90 Ft.	218 Channel Profile	1 48 05/15/2019
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/17/2018
	32.2 Ft.	213 Federal Aid Project Number	BRO-9(3) SITE 2
52 Deck Width	34.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-101-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	2,347	100	2,347	0	0	0	0	0	0
156/1:Timber Floor Beam	ft	118	59	69	42	49	0	0	0	0
1160/1:Crack (Timber)	ft	49	0	0	100	49	0	0	0	0
Notes:Shrinkage cracking throughout structure - 6/11/2019										
206/3:Timber Column	each	24	0	0	100	24	0	0	0	0
1160/3:Crack (Timber)	each	24	0	0	100	24	0	0	0	0
Notes:Shrinkage cracking throughout structure - 6/11/2019										
216/2:Timber Abutment	ft	79	0	0	100	79	0	0	0	0
1160/2:Crack (Timber)	ft	79	0	0	100	79	0	0	0	0
Notes:Shrinkage cracking throughout structure - 6/11/2019										
235/1:Timber Pier Cap	ft	157	0	0	100	157	0	0	0	0
1160/1:Crack (Timber)	ft	157	0	0	100	157	0	0	0	0
Notes:Shrinkage cracking throughout structure - 6/11/2019										
332/1:Timb Bridge Railing	ft	138	96	133	4	5	0	0	0	0
7000/1:Damage	ft	5	0	0	100	5	0	0	0	0
Notes:Minor traffic impact damage to bridge rail - 6/11/2019										
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Minor erosion behind wingwalls - 6/11/2019										

Remarks: B&A end markers on approach corners. SW bank eroding in channel. Moderate channel vegetation. Scour evident under the structure. Pier cross braces has minor cracks at bottom connections. - 6/11/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-101-13.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	CORNELL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	9 NORTH OF TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 03' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	599792.6 5211646.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 36 65 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 39 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	50 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	1 1 1 1
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 01, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 05/16/2017
49 Structure Length	40.03 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.6 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.6 Ft Lt-Side	212 Structure Load Rated	01/10/2018
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-101-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	400	99	396	1	4	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes:Various areas of spalling on beam soffits. - 7/1/2019										
215/3:Re Conc Abutment	ft	72	78	56	22	16	0	0	0	0
1130/3:Cracking (RC and Other)	ft	16	0	0	100	16	0	0	0	0
Notes:16 cracks counted in the abutments - 7/1/2019										
330/1:Metal Bridge Railing	ft	72	0	0	100	72	0	0	0	0
1000/1:Corrosion	ft	72	0	0	100	72	0	0	0	0
Notes:Metal bridge rail has speckle rust - 7/1/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Steel protective coating is 75% effective - 7/1/2019										
331/2:Re Conc Bridge Railing	ft	79	87	69	13	10	0	0	0	0
1130/2:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:10 cracks counted in the concrete bridge rail - 7/1/2019										
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Moderate channel scour to the south south. - 7/1/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Moderate channel scour to South. Double B&A end markers on approach corners. Minor rust on bridge rail. NW, NE, and SE corners of deck have a gap between outer box beams & wingwalls. E abut top of footing is exposed. Various areas of spalling on beam soffits. Erosion behind NW wingwall. - 7/1/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-101-14.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	CORNELL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00901 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	9 NORTH OF TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	28.894	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 03' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	599906.3 5211614.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 37 67 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 41 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	80 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 01, 2019
32 Approach Roadway Width	23 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.2 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 05/18/2017
49 Structure Length	40.03 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.6 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.6 Ft Lt-Side	212 Structure Load Rated	01/10/2018
51 Bridge Rdwy Width - Curb to Curb	28.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	31.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-101-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	400	98	392	2	8	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	8	0	0	100	8	0	0	0	0
Notes:Girders 1, 6 & 9 have minor spalls. There is a 1" hole on top of girder 3 10' from north end. South end of girder tops have multiple spalls. - 7/1/2019										
215/3:Re Conc Abutment	ft	72	57	41	43	31	0	0	0	0
1130/3:Cracking (RC and Other)	ft	31	0	0	100	31	0	0	0	0
Notes:Minor random cracking throughout the abutments - 7/1/2019										
330/1:Metal Bridge Railing	ft	72	58	42	42	30	0	0	0	0
1000/1:Corrosion	ft	30	0	0	100	30	0	0	0	0
Notes:Rust forming on metal bridge rails - 7/1/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Steel protective coating 75% effective - 7/1/2019										
331/2:Re Conc Bridge Railing	ft	79	96	76	4	3	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:Spalls in SW and NE bridge rail ends and a spall on the curb East side - 7/1/2019										
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Old pile in channel. Double b&a end markers on approach corners removed & laying on ground. Yellow RPMs on top rails. 1" metal conduit attached to west curb. Joints have been poured with grout & forms left in place between girders 4&5 & 7&8. 2 horizontal cracks in south abut. Minor concrete cracking throughout structure. Erosion has exposed both abutment footings. - 7/1/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-101-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	TOWER CITY CITY (PT.	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	20.895	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 40' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	600364.5 5198565.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	303 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2017 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	300 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	January 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	34.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	09/27/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE 10 X 4 X 58' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-101-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	174	100	174	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: New replacement in 2017 which has a Single B/A in all corners , Minor separation & misalignment.

Alert Code 1: Minor separation & misalignment.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-102-22.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	TOWER CITY CITY (PT.	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	20.895	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	601594.8 5197137.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2017 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	300 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	January 12, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	28.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	09/26/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE 8 X 5 X 75' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-102-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	225	100	225	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: New in 2017. A single B/A on all corners.

Alert Code 1: Minor misalignment & separation.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-102-22.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	TOWER CITY CITY (PT.	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	20.895	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 40' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	601094.8 5198223.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2017 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	300 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	January 12, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	34.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	09/26/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE 10 X 4 X 48, RCB		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-102-22.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	144	100	144	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: New in 2017. A single B/A on all corners Moderate cat tail growth & limited clearance for inspection.

Alert Code 1: minor misalignment & separation installed .

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-102-22.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	TOWER CITY CITY (PT.	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	20.895	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	601559.5 5197952.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2017 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	300 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	January 12, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	34.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	09/26/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE 10 X 4 X 48' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-102-22.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	144	99	142	1	2	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: New in 2017. A single B/A on all corners ,Moderate vegetation growth & limited clearance for inspection.

Alert Code 1: Moderate vegetation growth & limited clearance for inspection. Box # 2 (barrel # 2) has spall on west wall , minor misalignment & separation.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-102-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HILL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH OF TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 52' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 40' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	601182.7 5192900.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	July 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	35.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	15.7 Ft.	Underwater	N
48 Length of Max Span	13 Ft.	Other Special	N
49 Structure Length	35.10 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Kirkevold
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12-10X8-1X54-10 RCPA		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-102-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	108	79	85	21	23	0	0	0	0
1900/1:Distortion	ft	23	0	0	100	23	0	0	0	0
Notes:Minor distortion and separation in culverts - 7/8/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: NBI Remarks: Double end markers on approach corners, NW marker hanging by the bottom bolt. Vertical curves in both directions. Some dirt coming through joints. Channel scour - East. 1' - 1.5' silt accumulation in both barrels. Separation at east end of south barrel. - 7/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-103-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	ROCHESTER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER/DRAIN 46	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 2 NORTH OF PAGE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 10' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	601279.1 5226198.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	49 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	30 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1970 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 11, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 05/15/2017
49 Structure Length	62.99 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	07/03/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-103-04.0

Structure Number: 09-103-04.0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-103-04.0

8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
Notes:minor riprap displacement at the east abutment - 6/11/2019										
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
7000/3:Damage	each	1	0	0	100	1	0	0	0	0
Notes:Damage to SE wingwall - 6/11/2019										

Remarks: Minor erosion behind wingwalls. Abutment pile and pier pile paint system failed. East girder #4 has minor efflorescence. West girder #6 has cracks with 1' spall & exposed corroding steel. - 6/11/2019

Alert Code 1: Steel pile have section loss at waterline E abutment. NE and SE corners of embankment are eroding. Traffic impact with exposed steel at SE curb. - 6/11/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-103-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	83.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	LAKE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER/DRAIN 46	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 2 SOUTH OF PAGE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 07' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	601969.1 5219758.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 24 43 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 31 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	29 Tons
Age and Service		Appraisal	
27 Yr Built	1972 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 01, 2019
32 Approach Roadway Width	15 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	25.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	35 Ft.	218 Channel Profile	1 48 05/15/2019
49 Structure Length	73.16 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/10/2018
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-103-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,752	100	1,752	0	0	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	584	66	384	34	200	0	0	0	0
1130/1:Cracking (RC and Other)	ft	584	66	384	34	200	0	0	0	0
Notes:Random cracking throughout the driving surface. - 7/1/2019										
202/3:Steel Column	each	19	0	0	0	0	100	19	0	0
1000/3:Corrosion	each	19	0	0	0	0	100	19	0	0
Notes:Piling have rust, with minor section loss at waterline. - 7/1/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	20	200	80	799
3440/3:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	20	200	80	799
Notes:Paint peeled to base metal. 70% paint gone - 7/1/2019										
216/3:Timber Abutment	ft	59	34	20	66	39	0	0	0	0
1160/3:Crack (Timber)	ft	59	34	20	66	39	0	0	0	0
Notes:Weathering cracks throughout both timber abutments. - 7/1/2019										
231/1:Steel Pier Cap	ft	89	0	0	100	89	0	0	0	0
1000/1:Corrosion	ft	89	0	0	100	89	0	0	0	0
Notes:Steel Pier cap is rusty - 7/1/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has completely failed. - 7/1/2019										
235/1:Timber Pier Cap	ft	89	0	0	100	89	0	0	0	0
1160/1:Crack (Timber)	ft	89	0	0	100	89	0	0	0	0
Notes:Weathering cracks throughout the timber pier caps - 7/1/2019										
330/1:Metal Bridge Railing	ft	148	0	0	100	148	0	0	0	0
1000/1:Corrosion	ft	148	0	0	100	148	0	0	0	0
Notes:Metal bridge rail is rusty - 7/1/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has completely failed - 7/1/2019										
331/2:Re Conc Bridge Railing	ft	148	93	138	7	10	0	0	0	0
1130/2:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:10 cracks counted in concrete bridge rail - 7/1/2019										
4000/1:Settlement	each	1	100	1	0	0	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
7363/3:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Piling have rust, with minor section loss at waterline. - 7/1/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-103-08.0

Remarks: Minor scour under structure. Paint peeled to shop coat - 70% of surface area. South curb and rail are 2 1/2" out of alignment at pier 10/12/17 . NE cap has minor fire damage. Pier diagonal braces are bent & disconnected. Many areas of exposed steel on bottom of girders. Girder 1 E & 2 W are spalled. Top of girders are spalling at pier. NE wingwall replaced 10/15. Structure posted for 29 Tons from west only and sign is illegible. Old pile in channel. Erosion behind East wingwall and East abutment corners. - 7/1/2019

Alert Code 1: Top backwall planks are pulled away from deck. Piling have rust, with minor section loss at waterline. South curb and rail are 2 1/2" out of alignment at pier 7/1/19. - 7/1/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-103-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	80.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	LAKE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER/DRAIN 46	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 5 SOUTH OF PAGE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 04' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	601941.3 5214924.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel continuous	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 27 48 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 16 29 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 01, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.9 Ft.	Other Special	N
48 Length of Max Span	27 Ft.	218 Channel Profile	1 48 05/15/2019
49 Structure Length	58.07 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	06/21/2016
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-103-11.0

Structure Number: 09-103-11.0

Element / Env. / Description		Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
317/1:Timber Deck	sq.ft	1,528	0	0	90	1,378	10	150	0	0
1140/1:Decay/Section Loss	sq.ft	1,378	0	0	100	1,378	0	0	0	0
Notes:Varying degrees of decay in deck planks with moderate wearing on surface. - 7/1/2019										
1180/1:Abrasion	sq.ft	150	0	0	0	0	100	150	0	0
Notes:Varying degrees of decay in deck planks with moderate wearing on surface. - 7/1/2019										
1077/1:Steel Opn Girder/Beam	ft	289	0	0	100	289	0	0	0	0
1000/1:Corrosion	ft	289	0	0	100	289	0	0	0	0
Notes:Steel beams have rust - 7/1/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has completely failed - 7/1/2019										
2023/3:Steel Column	each	5	0	0	100	5	0	0	0	0
1000/3:Corrosion	each	5	0	0	100	5	0	0	0	0
Notes:Steel columns have rust - 7/1/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/3:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has completely failed - 7/1/2019										
2052/2:Re Conc Column	each	8	0	0	25	2	75	6	0	0
1130/2:Cracking (RC and Other)	each	8	0	0	25	2	75	6	0	0
Notes:Concrete columns have moderate horizontal cracking. - 7/1/2019										
2152/2:Re Conc Abutment	ft	52	81	42	19	10	0	0	0	0
1130/2:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:Cracks counted in the concrete abutments - 7/1/2019										
2162/2:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
2317/1:Steel Pier Cap	ft	26	0	0	100	26	0	0	0	0
1000/1:Corrosion	ft	26	0	0	100	26	0	0	0	0
Notes:Steel pier cap is rusty. - 7/1/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has completely failed - 7/1/2019										
2341/1:Re Conc Pier Cap	ft	52	81	42	17	9	2	1	0	0
1130/1:Cracking (RC and Other)	ft	10	0	0	90	9	10	1	0	0
Notes:Bearing seat at Girder 3 is cracked and spalled at the east abutment. - 7/1/2019										
3137/1:Fixed Bearing	each	5	0	0	100	5	0	0	0	0
1000/1:Corrosion	each	5	0	0	100	5	0	0	0	0
Notes:Fixed bearings are rusty - 7/1/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has completely failed - 7/1/2019										

Structure Number: 09-103-11.0

332/2:Timb Bridge Railing	ft	115	0	0	97	111	0	0	4	4
1140/2:Decay/Section Loss	ft	111	0	0	100	111	0	0	0	0
Notes:Timber bridge rail has minor decay and section loss throughout. - 7/1/2019										
7000/2:Damage	ft	4	0	0	0	0	0	0	100	4
Notes:Ends of bridge rail damaged due to traffic impact - 7/1/2019										
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	25	1	75	3	0	0	0	0
1080/2:Delamination/Spall/Patched Area	each	3	0	0	100	3	0	0	0	0
Notes:Spalls on NE & NW & SE wingwalls. - 7/1/2019										

Remarks: No end markers. Old pile in channel. Spalls on NE & NW & SE wingwalls. Scour under structure. - 7/1/2019

Alert Code 1: Paint peeled to base metal - rust evident - 100% of surface area. Erosion at east end of structure. Bearing seat at Girder 3 is cracked and spalled at the east abutment. Varying degrees of decay in deck planks with moderate wearing on surface. Concrete columns have moderate horizontal cracking. - 7/1/2019

Alert Code 2: East and West end plank & concrete backwall are broken creating a hole near the center allowing gravel to fall through and pile up on the abutment. Section loss at waterline on pier pile. - 7/1/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-103-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	CORNELL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00918 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	9 NORTH 2 EAST TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.500	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 03' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 38' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	602580.6 5211688.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 38 69 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 23 42 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1967 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	4 Stable, needs action
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	July 02, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	1 48 05/16/2017
50 Curb/Sidewalk Widths	1.6 Ft Rt-Side	Chaining Date	None
	1.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	01/10/2018
52 Deck Width	31.2 Ft.	213 Federal Aid Project Number	ER-61(2)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Kirkevold
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-103-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	400	100	400	0	0	0	0	0	0
Notes:Minor spalls on beams 4 and 5 - 7/2/2019										
215/3:Re Conc Abutment	ft	72	93	67	7	5	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
Notes:Abut spalled at NW & NE bearing areas. - 7/2/2019										
330/1:Metal Bridge Railing	ft	72	0	0	100	72	0	0	0	0
1000/1:Corrosion	ft	72	0	0	100	72	0	0	0	0
Notes:Bridge rail has speckled rust - 7/2/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Steel protective coating is 75% effective - 7/2/2019										
331/2:Re Conc Bridge Railing	ft	79	75	59	25	20	0	0	0	0
1130/2:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
Notes:Cracks counted in concrete bridge rail - 7/2/2019										
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
2210/3:Movement	each	2	0	0	100	2	0	0	0	0
Notes:Slope protection is beginning to slide into channel - 7/2/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Double B&A end markers on approach corners. Yellow RPMs on rail. Minor joint seepage. Side pipe in NE quadrant has created heavy channel erosion & has washed out. 1" metal conduit attached to north curb. NE concrete end post has minor collision damage. - 7/2/2019

Alert Code 1: Abutment spalled at NW & NE bearing areas. - 7/2/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-103-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	CORNELL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	8 NORTH 1 EAST TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 02' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	601651.3 5210072.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 35 63 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 38 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1970 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	3 Intolerable - Correct
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 02, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 05/16/2017
49 Structure Length	56.10 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/07/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-103-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	449	98	442	0	0	1	4	1	3
1080/1:Delamination/Spall/Patched Area	ft	7	0	0	0	0	57	4	43	3
Notes:Small spalls on east & west girders 2 & 8, with exposed steel at 1 & 3 on east & 1 on west. - 7/2/2019										
202/3:Steel Column	each	19	0	0	100	19	0	0	0	0
1000/3:Corrosion	each	19	0	0	100	19	0	0	0	0
Notes:Steel columns have rust - 7/2/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Paint peeled to base metal 75% surface area - 7/2/2019										
216/3:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
1160/3:Crack (Timber)	ft	52	0	0	100	52	0	0	0	0
Notes:Minor cracking throughout abutments - 7/2/2019										
231/1:Steel Pier Cap	ft	79	0	0	100	79	0	0	0	0
1000/1:Corrosion	ft	79	0	0	100	79	0	0	0	0
Notes:Rust forming on steel pier cap - 7/2/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Paint peeled to base metal 25% of surface area - 7/2/2019										
235/1:Timber Pier Cap	ft	79	33	26	67	53	0	0	0	0
1160/1:Crack (Timber)	ft	53	0	0	100	53	0	0	0	0
Notes:Timber pier cap is split. - 7/2/2019										
330/1:Metal Bridge Railing	ft	112	0	0	100	112	0	0	0	0
1000/1:Corrosion	ft	112	0	0	100	112	0	0	0	0
Notes:Steel guard rail is rusty - 7/2/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has completely failed - 7/2/2019										
331/2:Re Conc Bridge Railing	ft	112	100	112	0	0	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	3	100	3	0	0	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
7363/3:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Varying degrees piling rust, and minor section loss at groundline. - 7/2/2019										
8398/3:Slope Protection	each	1	0	0	0	0	0	0	100	1
Notes:Slope protection has failed. - 7/2/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Yellow markers on all corners. Rough approaches. Sharp horizontal curves both directions. Slope protection has failed. Heavy channel vegetation, weathering cracks to all timber elements. Minor scour under structure. - 7/2/2019

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SEC 409

Structure Number: 09-103-14.0

Alert Code 1: Varying degrees piling rust, and minor section loss at groundline. Girders have minor random cracking throughout. Small spalls on east & west girders 2 & 8, with exposed steel at 1 & 3 on east & 1 on west. Timber pier cap is split. - 7/2/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-103-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	TOWER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 1 EAST TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 27.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	602106.6 5193910.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	December 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	54.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	12/14/2018
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
QUAD 12 X 5 X 50 RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-103-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
243/1:Other Culvert	ft	200	96	192	4	8	0	0	0	0
Notes:Erosion had exposed at all corners of the box. - 12/16/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:No defected. - 12/16/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Minor wash out at all corner of the structure. - 12/16/2019										

Remarks: 12/2018 - Replaced with a new RCB Incomplete Inspection 10-16-19 due to high water Incomplete Inspection 11-17-19 due to high water - 12/16/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-103-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HILL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 3 SOUTH TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 52' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	602755.4 5192293.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	3 Bank Prot Failed
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2014 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	January 22, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	16 Ft.	Other Special	N
49 Structure Length	53.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	10/23/2014
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
TRIPLE 16' X 6' X 63' PRCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-103-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	189	100	189	0	0	0	0	0	0
Notes:_										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: New in 2014. OCT 30 2017 1/2018 - Unable to inspect due to high water.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-103-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HILL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 4 SOUTH TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 38' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	603634.2 5190813.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2011 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	January 09, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	29.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/23/2012
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0009(041)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 14' X 12' X 66' PRECAST RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-103-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	132	85	112	15	20	0	0	0	0
Notes: _										
1010/3:Cracking	ft	20	0	0	100	20	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Single B/A at all 4 corners. Vertical curves both directions.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-103-42.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	PONTIAC TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 1 NORTH ENDERLIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 38' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 38' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	604076.7 5166033.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 46 83 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 28 52 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1982 106 Yr Reconstructed	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 17, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/12/2017
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-103-42.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	581	100	581	0	0	0	0	0	0
156/1:Timber Floor Beam	ft	23	52	12	48	11	0	0	0	0
Notes:Weathering cracked. - 12/17/2019										
1150/1:Check/Shake	ft	11	0	0	100	11	0	0	0	0
Notes:Weathering shrinkage check . - 12/17/2019										
202/3:Steel Column	each	10	0	0	0	0	100	10	0	0
Notes:Incomplete Element Inspection 10-28-19 - 12/17/2019										
1000/3:Corrosion	each	10	0	0	0	0	100	10	0	0
Notes:Moderate piling rust with minor section loss. - 12/17/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:No longer effectiveness. - 12/17/2019										
3440/3:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:No longer effectiveness. - 12/17/2019										
216/3:Timber Abutment	ft	52	50	26	50	26	0	0	0	0
Notes:Minor shift on back walls timber. - 12/17/2019										
1150/3:Check/Shake	ft	26	0	0	100	26	0	0	0	0
Notes:Incomplete Element Inspection 10-28-19 - 12/17/2019										
231/1:Steel Pier Cap	ft	52	0	0	100	52	0	0	0	0
Notes:Corrosion. - 12/17/2019										
1000/1:Corrosion	ft	52	0	0	100	52	0	0	0	0
Notes:Rust had initiated - 12/17/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:No longer effectiveness. - 12/17/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Not fully effective. - 12/17/2019										
235/1:Timber Pier Cap	ft	52	0	0	100	52	0	0	0	0
Notes:Functioning as its intended. - 12/17/2019										
1150/1:Check/Shake	ft	52	0	0	100	52	0	0	0	0
Notes:Weathering shrinkage. - 12/17/2019										
332/2:Timb Bridge Railing	ft	48	100	48	0	0	0	0	0	0
7363/3:Steel Section Loss	each	1	100	1	0	0	0	0	0	0
Notes:Minor pitting rust. - 12/17/2019										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
6000/3:Scour	each	4	0	0	100	4	0	0	0	0
Notes:Minor erosion behind wingwalls - 12/17/2019										

Remarks: 6" X 12" markers at all 4 corners. Sharp vertical curves both directions. Deck is wider than the wing wall connections. Inspection incomplete due to high water - 12/17/2019

Alert Code 1: Moderate piling rust with minor section loss. Erosion behind NE wing wall - 12/17/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-06.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	ROCHESTER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00910 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER/DRAIN 46	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST OF PAGE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.400	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 09' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 38' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	603494.0 5223008.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2017 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	235 30 Year of ADT	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 16, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	22.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	09/27/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Kirkevold
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 10 X 8 X 64' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	128	100	128	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	LAKE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00918 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER/DRAIN 46	102 Direction of Traffic	2 2-way traffic
09 Location	9 NORTH 3 EAST TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.400	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 03' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 37' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	603865.4 5211704.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	4 Load Testing
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 35 64 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	4 Load Testing
Membrane	0 None	66 Inv. Rating	HS 20 37 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	70 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 02, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	25.9 Ft.	Other Special	N
48 Length of Max Span	57 Ft.	218 Channel Profile	1 48 05/15/2019
49 Structure Length	60.04 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	07/01/2012
51 Bridge Rdwy Width - Curb to Curb	25.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,647	0	0	100	1,647	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	1,647	0	0	100	1,647	0	0	0	0
Notes:Deck has minor wear and abrasion with gravel overburden - 7/2/2019										
109/1:Pre Opn Conc Girder/Beam	ft	299	78	232	22	67	0	0	0	0
1110/1:Cracking (PSC)	ft	67	0	0	100	67	0	0	0	0
Notes:Horizontal hairline crack 0.005" in outer web of north girder, full length. Horizontal crack 0.007" with efflorescence in south girder, west end thru both sides of girder. - 7/2/2019										
215/2:Re Conc Abutment	ft	56	89	50	11	6	0	0	0	0
1130/2:Cracking (RC and Other)	ft	6	0	0	100	6	0	0	0	0
Notes:6 cracks counted in the abutments - 7/2/2019										
313/1:Fixed Bearing	each	10	0	0	100	10	0	0	0	0
1000/1:Corrosion	each	10	0	0	100	10	0	0	0	0
Notes:Fixed bearings have rust - 7/2/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	50	500	0	0	50	499
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	50	500	0	0	50	499
Notes:Steel protective coating is 50% effective - 7/2/2019										
330/1:Metal Bridge Railing	ft	121	0	0	100	121	0	0	0	0
1000/1:Corrosion	ft	121	0	0	100	121	0	0	0	0
Notes:Bridge rail has speckled rust - 7/2/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Steel protective coating is 75% effective - 7/2/2019										
331/1:Re Conc Bridge Railing	ft	121	88	107	12	14	0	0	0	0
1130/1:Cracking (RC and Other)	ft	14	0	0	100	14	0	0	0	0
Notes:14 cracks counted in concrete bridge rail - 7/2/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NE B&A marker removed. Yellow RPMs on rail. 1 3/4" plastic conduit attached to north rail. BDI & Houston Engr. Load tested bridge to produce new load rating 7/2012 gld 5/2016 - Concrete repairs and reinforcement of the east abutment were completed. Cracking in E abutment beam seat. Minor erosion E bridge deck corners. Brace on E abutment - 7/2/2019

Alert Code 2: 10/15 Horizontal hairline crack 0.005" in outer web of north girder, full length. Horizontal crack 0.007" with efflorescence in south girder, west end thru both sides of girder. - 7/2/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	75.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	CORNELL TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER/DRAIN 46	102 Direction of Traffic	2 2-way traffic
09 Location	8 NORTH 2 EAST TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 02' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 37' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	603858.3 5210096.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 19 34 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 14 25 Tons
Dk Protect	None	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	21 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed	1995	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	2019	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	15 Ft.	90 Date of Last Inspection	July 02, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	27 Ft.	Other Special	N
49 Structure Length	58.07 Ft.	218 Channel Profile	1 48 05/16/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/10/2018
	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,389	10	141	87	1,208	3	40	0	0
1180/1:Abrasion	sq.ft	1,208	0	0	100	1,208	0	0	0	0
Notes:Timber deck has minor abrasion - 7/2/2019										
7000/1:Damage	sq.ft	40	0	0	0	0	100	40	0	0
Notes:Split and broken deck planks - 7/2/2019										
111/1:Timber Open Girder	ft	814	50	407	50	407	0	0	0	0
1160/1:Crack (Timber)	ft	814	50	407	50	407	0	0	0	0
Notes:Shrinkage cracks throughout timber beams - 7/2/2019										
202/3:Steel Column	each	6	0	0	0	0	100	6	0	0
1000/3:Corrosion	each	6	0	0	0	0	100	6	0	0
Notes:Pier piling have moderate to heavy rust at the water line. Pier pile have section loss at water line. - 7/2/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/3:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has completely failed - 7/2/2019										
205/2:Re Conc Column	each	8	0	0	100	8	0	0	0	0
1130/2:Cracking (RC and Other)	each	8	0	0	100	8	0	0	0	0
Notes:Minor random cracking on concrete columns - 7/2/2019										
215/2:Re Conc Abutment	ft	52	100	52	0	0	0	0	0	0
231/1:Steel Pier Cap	ft	23	0	0	100	23	0	0	0	0
1000/1:Corrosion	ft	23	0	0	100	23	0	0	0	0
Notes:Steel pier cap is rusty - 7/2/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has completely failed - 7/2/2019										
235/1:Timber Pier Cap	ft	49	100	49	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	115	0	0	100	115	0	0	0	0
1160/1:Crack (Timber)	ft	115	0	0	100	115	0	0	0	0
Notes:Weathering cracks throughout structure - 7/2/2019										
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
7363/3:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Pier piling have moderate to heavy rust at the water line. Pier pile have section loss at water line. - 7/2/2019										
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Posted 9 tons per axle, 21 tons gross. Load limit sign sw corner. 6"x12" yellow pvc end markers on approach corners. Minor erosion behind NE wingwall. Dirt on abutment caps. Girders cracked on west # 2, 3, 8, 13 & 14. Girders cracked on east # 1, 3, 6, 10 & 11. Abutments have random cracking and scaling. NE rail post is 50% gnawed through. - 7/2/2019

Alert Code 1: Pier piling have moderate to heavy rust at the water line. Pier pile have section loss at water line. - 7/2/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	79.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	CORNELL TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER/DRAIN 46	102 Direction of Traffic	2 2-way traffic
09 Location	7 NORTH 2 EAST TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 01' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 38' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	603651.4 5208485.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 21 38 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 15 28 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	28 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 16, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	18 Ft.	218 Channel Profile	1 48 05/16/2019
49 Structure Length	39.04 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/16/2018
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-15.0

Structure Number: 09-104-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	936	64	600	36	336	0	0	0	0
1180/1:Abrasion	sq.ft	936	64	600	36	336	0	0	0	0
Notes:Minor abrasion on deck - 12/16/2019										
111/1:Timber Open Girder	ft	469	64	300	36	169	0	0	0	0
Notes:Check cracked on girder # 1,9 & 10. - 12/16/2019										
1020/1:Connection	ft	11	73	8	27	3	0	0	0	0
Notes:girder # 1, 9 & 10 . Had cracked. - 12/16/2019										
1160/1:Crack (Timber)	ft	166	0	0	100	166	0	0	0	0
Notes:Girders have cracks on east #9 & 11, west #10. - 12/16/2019										
202/3:Steel Column	each	15	0	0	100	15	0	0	0	0
Notes:Functioning as they're intended but some section loss below the water line. - 12/16/2019										
1000/3:Corrosion	each	15	0	0	100	15	0	0	0	0
Notes:Functioning as it's intended, Section loss at water line on pile. Broken pier cross brace-lower right. - 12/16/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	100	999	0	0	0
Notes:Steel elements, steel protection coating had very limited effectiveness. - 12/16/2019										
3430/3:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	999	0	0	0	100	999	0	0	0
Notes:Steel protection coating had no longer effectiveness . Section loss at water line on pile. - 12/16/2019										
216/3:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
Notes:Abutments stem has a weathering cracked. - 12/16/2019										
1180/3:Abrasion	ft	52	0	0	100	52	0	0	0	0
Notes:10-17-19 3-4' deep scour hole under structure. Both abutments are tipping in (timber bearing had rotated) - 12/16/2019										
231/1:Steel Pier Cap	ft	72	100	72	0	0	0	0	0	0
Notes:Functioning as intended. - 12/16/2019										
1000/1:Corrosion	ft	72	100	72	0	0	0	0	0	0
Notes:Steel coating had really limited of steel coating protection . - 12/16/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	100	999	0	0	0
Notes:Steel coating protection had no longer effectiveness. - 12/16/2019										
235/1:Timber Pier Cap	ft	79	0	0	100	79	0	0	0	0
1160/1:Crack (Timber)	ft	38	0	0	100	38	0	0	0	0
Notes:Weathering cracks - 12/16/2019										
1900/1:Distortion	ft	41	0	0	100	41	0	0	0	0
Notes:Both bearing caps had rotated. - 12/16/2019										
332/1:Timb Bridge Railing	ft	79	0	0	68	54	32	25	0	0
Notes:Weathering cracked , rail post had rotten. - 12/16/2019										
1140/1:Decay/Section Loss	ft	79	0	0	68	54	32	25	0	0
Notes:Some decay in curb & to all rail posts. - 12/16/2019										
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
6000/3:Scour	each	1	0	0	100	1	0	0	0	0

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SEC 409

Structure Number: 09-104-15.0

7363/1:Steel Section Loss	each	1	0	0	0	0	100	1	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
Notes:NE wing has a minor tilted out.. - 12/16/2019										
1900/3:Distortion	each	1	0	0	100	1	0	0	0	0
Notes:Moderate erosion behind SW wingwall. NE wingwall tilting out. - 12/16/2019										

Remarks: Rough approaches. Posted for 28 tons. 6" x 12" markers at all corner (rails). - 12/16/2019

Alert Code 1: Broken pier cross brace-lower right. Moderate erosion behind SW wingwall. Minor backwall separation. Some decay in curb & to all rail posts. NE wingwall tilting out. Top board of NW wingwall is broken. 3-4' deep scour hole under structure. North diaphragms are missing. - 12/16/2019

Alert Code 2: Section loss at water line on pile. 10/15 Both abutments are tipping in, steel caps have moved on top of pile to their edge. Girders have cracks on east #9 & 11, west #10. West timber cap is split. - 12/16/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	CORNELL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 NORTH 3 EAST TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 59' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 37' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	604268.7 5205273.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2017 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	September 05, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	44.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	07/06/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
TRIPLE 14 X 8 X 54' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	162	90	146	10	16	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	16	0	0	100	16	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 7/6/2017 - Bridge replaced with a triple 14 x 8 x 54' RCB 9/5/2017 - Minor misalignment and separation of culvert sections. Minor cracking and spalling caused by installation. B&A end markers at all corners.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	CORNELL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 2 EAST TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 58' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 37' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	604841.0 5204115.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 35 63 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 38 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1970 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 16, 2019
32 Approach Roadway Width	15 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.6 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	1 48 05/16/2019
49 Structure Length	73.16 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/16/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-104-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	584	97	564	3	20	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	20	0	0	100	20	0	0	0	0
Notes:Girder 5 & 6, south span have multiple minor spall areas with exposed rebar. - 12/16/2019										
206/3:Timber Column	each	19	0	0	95	18	0	0	5	1
1160/3:Crack (Timber)	each	19	0	0	95	18	0	0	5	1
Notes:West pier pile is split on top. NE & SW pier braces are cracked. Pier piling 1, 2 & 3 have been braced with 3"x12" treated timber bolted to both sides. - 12/16/2019										
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	79	0	0	100	79	0	0	0	0
1160/1:Crack (Timber)	ft	79	0	0	100	79	0	0	0	0
Notes:Minor weathering cracks in pier cap - 12/16/2019										
301/1:Pourable Joint Seal	ft	26	0	0	0	0	0	0	100	26
2330/1:Seal Damage	ft	26	0	0	0	0	0	0	100	26
Notes:Joint seal has failed - 12/16/2019										
330/1:Metal Bridge Railing	ft	148	0	0	100	148	0	0	0	0
1000/1:Corrosion	ft	143	0	0	100	143	0	0	0	0
Notes:Minor corrosion on metal bridge rail - 12/16/2019										
7000/1:Damage	ft	5	0	0	100	5	0	0	0	0
Notes:Minor collision damage to rail - NW corner. - 12/16/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	100	999	0	0	0	0
Notes:steel protective coating is substantially effective - 12/16/2019										
331/1:Re Conc Bridge Railing	ft	148	100	148	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	0	0	0	0	100	2
1220/3:Deterioration (Other)	each	2	0	0	0	0	0	0	100	2
Notes:Abutment riprap is displaced. - 12/16/2019										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
6000/3:Scour	each	4	0	0	100	4	0	0	0	0
Notes:Minor erosion behind wingwalls. - 12/16/2019										

Remarks: 6" x 12" yellow reflectors on all four corners. Yellow RPMs on rail. Girder 5 & 6, south span have multiple small spall areas with exposed rebar. Minor separation of girders. West pier pile is split on top. Pier piling 1, 2 & 3 have been braced with 3"x12" treated timber bolted to both sides. Minor collision damage to rail - NW corner. Minor erosion behind wingwalls. Abutment riprap is displaced. Minor channel aggregation to the east. - 12/16/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	37.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HILL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 4 NORTH OF ALICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 37' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	605002.4 5185877.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 8 15 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 6 11 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	06 Tons
Age and Service		Appraisal	
27 Yr Built	1966 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 16, 2019
32 Approach Roadway Width	10 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	32 Ft.	218 Channel Profile	1 48 05/16/2019
49 Structure Length	65.94 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.3 Ft Lt-Side	212 Structure Load Rated	01/16/2018
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-29.0

Structure Number: 09-104-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,583	75	1,187	0	0	25	396	0	0
1170/1:Split/Delamination (Timber)	sq.ft	396	0	0	0	0	100	396	0	0
Notes:Approx. 25% of deck planks are spilt, cracked, rotted. - 12/16/2019										
1180/1:Abrasion	sq.ft	1,187	0	0	100	1,187	0	0	0	0
Notes:Incomplete Element Inspection 10-16-19 Approx. 25% of deck planks are spilt, cracked, rotted, or crushed. - 12/16/2019										
111/1:Timber Open Girder	ft	925	0	0	92	855	8	70	0	0
Notes:Span 2 : girder # 11,12 & 14 cracked girder # 5 has splitter. Span # 1: girder # 2,3,4,6 & 11 had cracked. - 12/16/2019										
1150/1:Check/Shake	ft	855	0	0	100	855	0	0	0	0
Notes:Incomplete Element Inspection 10-16-19 Girder 11, span 1 has a shrinkage crack. - 12/16/2019										
1170/1:Split/Delamination (Timber)	ft	70	0	0	0	0	100	70	0	0
Notes:IGirders 2, 4, 6, 7 and 8, span 1 are cracked and have been repaired with a clamp type device. Girder 5, spans 1 and 2 is cracked. - 12/16/2019										
202/3:Steel Column	each	17	0	0	100	17	0	0	0	0
Notes:Functioning as its intended. - 12/16/2019										
1000/3:Corrosion	each	17	0	0	100	17	0	0	0	0
Notes:Piling rust with minor section loss. - 12/16/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Painted coating had No longer effectiveness . - 12/16/2019										
3440/3:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating had no longer effectiveness. - 12/16/2019										
216/3:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
Notes:Gap between 2 abutment stem , weathering cracked . - 12/16/2019										
1150/3:Check/Shake	ft	52	0	0	100	52	0	0	0	0
Notes:weathering cracked to all timber elements. - 12/16/2019										
231/1:Steel Pier Cap	ft	79	0	0	100	79	0	0	0	0
Notes:Corrosion. - 12/16/2019										
1000/1:Corrosion	ft	79	0	0	100	79	0	0	0	0
Notes:corosion - 12/16/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating had No longer effectiveness . - 12/16/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:No longer effectiveness. - 12/16/2019										
235/1:Timber Pier Cap	ft	79	0	0	100	79	0	0	0	0
Notes:West cap had rotated, east cap had weathering cracked. - 12/16/2019										
1150/1:Check/Shake	ft	79	0	0	100	79	0	0	0	0
Notes:Weathering cracked , checked. - 12/16/2019										
332/1:Timb Bridge Railing	ft	131	0	0	100	131	0	0	0	0
1160/1:Crack (Timber)	ft	131	0	0	100	131	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-29.0

7363/3:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Minor section , patched rust. - 12/16/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:Functions has no defects. - 12/16/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Channel degradation - South. Vertical curve - East. Wood duck house installed on SE wingwall. Posted for 7 tons only at the SW corner, the sign is full of bullet holes and hardly. Wash-out created hole behind NW & SW wingwall that narrow the road way. - 12/16/2019

Alert Code 1: Girder 11, span 1 has a shrinkage crack. Piling rust with minor section loss. Gap between 2 boards in west backwall-no evident loss of material through the gap. Approx. 25% of deck planks are spilt, cracked, rotted. - 12/16/2019

Alert Code 2: Girders 2, 4, 6, 7 and 8, span 1 are cracked and have been repaired with a clamp type device. Girder 5, spans 1 and 2 is cracked. - 12/16/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HILL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 3 NORTH OF ALICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 37' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	604725.1 5184266.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	4 Low Slump Concrete	64 Oper. Rating	HS 43 79 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 23 43 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2014 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	December 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	42 Ft.	Other Special	N
49 Structure Length	124.00 Ft.	218 Channel Profile	1 48 05/16/2019
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/09/2014
	28.0 Ft.	213 Federal Aid Project Number	TB1309
52 Deck Width	30.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	3,720	100	3,700	1	20	0	0	0	0
1130/3:Cracking (RC and Other)	sq.ft	3,720	100	3,700	1	20	0	0	0	0
Notes:Thermal cracking on deck. - 12/16/2019										
520/3:Conc Re Prot Sys	sq.ft	3,720	100	3,720	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	496	99	490	1	6	0	0	0	0
1120/1:Efflorescence/Rust Staining	ft	6	0	0	100	6	0	0	0	0
Notes:Rust staining on girders. - 12/16/2019										
210/1:Re Conc Pier Wall	ft	58	100	58	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	60	100	60	0	0	0	0	0	0
310/1:Elastomeric Bearing	each	16	100	16	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	248	100	248	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	248	100	248	0	0	0	0	0	0
Notes:Hairline cracking on concrete railing. - 12/16/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Speed limit 40 on east side only. Electric fence attached to north side of bridge railing. Hairline cracking on concrete railing. Thermal cracking on deck. Rust staining on girders. - 12/16/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-31.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	CLIFTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 3 NORTH OF ALICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 47' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 37' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	605367.7 5183813.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	K Closed to all traffic
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 47 85 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 28 51 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	December 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	35 Ft.	Other Special	N
49 Structure Length	74.15 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/16/2018
52 Deck Width	30.2 Ft.	213 Federal Aid Project Number	BRO-9(5)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-31.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	592	100	589	0	0	0	1	0	2
Notes:Incomplete Element Inspection 10-16-19 - 12/19/2019										
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	0	0	0	0	100	2
Notes:Incomplete Element Inspection 10-16-19 East beams at pier spalled & deteriorated, south end has exposed rebar. - 12/19/2019										
1110/1:Cracking (PSC)	ft	1	0	0	0	0	100	1	0	0
Notes:Incomplete Element Inspection 10-16-19 - 12/19/2019										
210/3:Re Conc Pier Wall	ft	30	90	27	10	3	0	0	0	0
Notes:Incomplete Element Inspection 10-16-19 - 12/19/2019										
1120/3:Efflorescence/Rust Staining	ft	3	0	0	100	3	0	0	0	0
Notes:Incomplete Element Inspection 10-16-19 Rust on pier piling. - 12/19/2019										
215/2:Re Conc Abutment	ft	62	89	55	11	7	0	0	0	0
Notes:Incomplete Element Inspection 10-16-19 - 12/19/2019										
6000/2:Scour	ft	7	0	0	100	7	0	0	0	0
Notes:Incomplete Element Inspection 10-16-19 Bottom of south abutment is exposed and rip rap is displaced. - 12/19/2019										
234/1:Re Conc Pier Cap	ft	30	77	23	23	7	0	0	0	0
Notes:Incomplete Element Inspection 10-16-19 - 12/19/2019										
1080/1:Delamination/Spall/Patched Area	ft	7	0	0	100	7	0	0	0	0
Notes:Incomplete Element Inspection 10-16-19 - 12/19/2019										
301/1:Pourable Joint Seal	ft	30	0	0	0	0	0	0	100	30
7000/1:Damage	ft	30	0	0	0	0	0	0	100	30
Notes:joint seal has failed - 12/19/2019										
330/1:Metal Bridge Railing	ft	148	100	148	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	148	50	74	50	74	0	0	0	0
1130/1:Cracking (RC and Other)	ft	74	0	0	100	74	0	0	0	0
Notes:cracks counted in concrete bridge rail - 12/19/2019										
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
Notes:Incomplete Element Inspection 10-16-19 - 12/19/2019										
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Incomplete Element Inspection 10-16-19 Bottom of south abutment is exposed and rip rap is displaced. Channel erosion - SE & SW quadrants. - 12/19/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Incomplete Element Inspection 10-16-19 - 12/19/2019										

Remarks: Double B&W end marker on approach corners only. Vertical curve to the South. Horizontal curve to the North. Rough approaches. 1 1/2" pvc conduit attached to east side. Incomplete Inspection 10-16-19 unable to inspect underside of structure due to high water. Incomplete Inspection 11-7-19 unable to inspect underside of structure due to high water. Roadway to structure is closed - 12/19/2019

Alert Code 1: East beams at pier spalled & deteriorated, south end has exposed rebar. Bottom of south abutment is exposed and rip rap is displaced. Rust on pier piling. Channel erosion - SE & SW quadrants. - 12/19/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-37.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	PONTIAC TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 4 SOUTH OF ALICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 42' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 37' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	604680.1 5173001.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 32 59 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1969 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	75 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 23, 2019
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 05/17/2017
49 Structure Length	92.85 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/07/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch, Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-37.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
16/1:Re Conc Top Flange	sq.ft	2,377	75	1,777	25	600	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	7	0	0	100	7	0	0	0	0
Notes:Several shallow spalls along edges of beams - 10/23/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	593	0	0	100	593	0	0	0	0
Notes:Minor wear of driving surface - 10/23/2019										
110/1:Re Conc Opn Girder/Beam	ft	745	100	745	0	0	0	0	0	0
202/3:Steel Column	each	26	0	0	50	13	50	13	0	0
1000/3:Corrosion	each	26	0	0	50	13	50	13	0	0
Notes:Lower cross brace between piles at Pier 2 is gone. Pile has moderate rust & section loss. - 10/23/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/3:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Coating is non-existent - 10/23/2019										
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
1150/3:Check/Shake	ft	52	100	52	0	0	0	0	0	0
231/1:Steel Pier Cap	ft	105	100	105	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Coating is non-existent - 10/23/2019										
235/1:Timber Pier Cap	ft	105	81	85	19	20	0	0	0	0
1150/1:Check/Shake	ft	20	0	0	100	20	0	0	0	0
Notes:Several shallow splits of timber - 10/23/2019										
330/1:Metal Bridge Railing	ft	187	0	0	98	184	2	3	0	0
1000/1:Corrosion	ft	184	0	0	100	184	0	0	0	0
Notes:Minor corrosion on metal bridge rail - 10/23/2019										
7000/1:Damage	ft	3	0	0	0	0	100	3	0	0
Notes:Minor collision damage at SE corner of railing. - 10/23/2019										
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	187	95	178	5	9	0	0	0	0
1130/1:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes:Cracks counted in concrete bridge rail - 10/23/2019										
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Minor scour under structure. - 10/23/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
7000/3:Damage	each	0	0	0	0	0	0	0	0	0
Notes:North end of NE wingwall has impact damage - 10/23/2019										

Remarks: 6"x12" amber end markers on corners. Signed 'Do Not Pass' east & west. Moderate vertical curves both directions. Channel aggradation south. Old pile in channel. 10/29/2015: New steel pier and abutment caps. - 10/23/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-37.0

Alert Code 1: Minor scour under structure. Piling & caps have moderate rust. Minor spalling at ends of girders at joints. Minor collision damage at SE corner of railing. Lower cross brace between piles at Pier 2 is gone. - 10/23/2019

Alert Code 2: Pile has moderate rust & section loss. - 10/23/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-104-40.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	PONTIAC TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 1 WEST ENDERLIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 39' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 37' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	604808.6 5168158.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 26 47 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1997 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	July 12, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	52 Ft.	Other Special	N
49 Structure Length	161.09 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/25/1997
	27.9 Ft.	213 Federal Aid Project Number	DPI-0036(003)092
52 Deck Width	29.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-104-40.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,747	80	3,798	20	949	0	0	0	0
7000/1:Damage	sq.ft	949	0	0	100	949	0	0	0	0
Notes:Rain damage to deck during pour - 7/12/2019										
520/1:Conc Re Prot Sys	sq.ft	441	100	441	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	643	100	643	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	59	97	57	3	2	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Pier 3, Beam seats 1 & 2 have minor spalls. - 7/12/2019										
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
1130/2:Cracking (RC and Other)	ft	1	100	1	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	322	100	322	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: No end markers. Vertical and horizontal curves west. Posted for 35 MPH in westbound direction only. East 1/2 of deck has minor spalls, popouts, & exposed aggregate due to rain during deck pave. Abutment riprap has settled. Pier 3, Beam seats 1 & 2 have minor spalls. Vertical hairline crack under beamseat West abutment. - 7/12/2019

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SEC 409

Structure Number: 09-105-18.0

200 System Designation	2 – County On	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	CORNELL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00922 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 2 EAST TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.999	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 58' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 37' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	605098.4 5203680.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	71 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	43 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	70 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 16, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 05/16/2019
49 Structure Length	81.04 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	06/21/2016
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 09-105-18.0

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 09-105-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,077	96	2,000	4	77	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	27	0	0	100	27	0	0	0	0
Notes:Underside deck has efflorescences showing. - 12/16/2019										
1130/1:Cracking (RC and Other)	sq.ft	50	0	0	100	50	0	0	0	0
Notes:Moderate random deck cracking - some soffit efflorescence with rust visible. East span has had deck patched. - 12/16/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	2,050	0	0	100	2,050	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	486	82	400	18	86	0	0	0	0
Notes:Corrosion. - 12/16/2019										
1000/1:Corrosion	ft	86	0	0	100	86	0	0	0	0
Notes:Anchor bolt missing at pier on south girder. Paint peeled to base metal - rust evident 45%. - 12/16/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	90	900	10	99	0	0
Notes:Incomplete Element Inspection 10-17-19 - 12/16/2019										
7000/1:Damage	sq.ft	99	0	0	0	0	100	99	0	0
Notes:paint has chalk appeared & rust initially forming.. - 12/16/2019										
210/3:Re Conc Pier Wall	ft	26	89	23	12	3	0	0	0	0
Notes:Pier wall has 3 cracked size 1/16". - 12/16/2019										
1130/3:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
Notes:Pier has 3 cracking. Anchor bolt missing at pier on south girder. - 12/16/2019										
215/3:Re Conc Abutment	ft	56	20	11	80	45	0	0	0	0
Notes:East abutment had 8 cracked , 5 rebar exposed. West abutment had 7 cracked. - 12/16/2019										
1090/3:Exposed Rebar	ft	5	0	0	100	5	0	0	0	0
Notes:East abutment had abrasions some small areas of 5 exposed & corroded rebars - 12/16/2019										
1130/3:Cracking (RC and Other)	ft	12	0	0	100	12	0	0	0	0
Notes:Incomplete Element Inspection 10-17-19 Abutments have minor cracking. - 12/16/2019										
1190/3:Abrasion(PSC/RC)	ft	28	0	0	100	28	0	0	0	0
Notes:East abutment has moderated abrasion areas, - 12/16/2019										
234/1:Re Conc Pier Cap	ft	30	80	24	20	6	0	0	0	0
Notes:pier cap # 2 has 6 hair lines cracking. - 12/16/2019										
301/1:Pourable Joint Seal	ft	26	0	0	0	0	0	0	100	26
Notes:Damaged - 12/16/2019										
7000/1:Damage	ft	26	0	0	0	0	0	0	100	26
Notes:Joint seal has failed - 12/16/2019										
313/2:Fixed Bearing	each	24	0	0	96	23	4	1	0	0
Notes:Functioning as its intended, some hair line cracked at the beam seats . - 12/16/2019										
1000/2:Corrosion	each	23	0	0	100	23	0	0	0	0
Notes:Initiated rust forming. - 12/16/2019										
1020/2:Connection	each	1	0	0	0	0	100	1	0	0
Notes:Incomplete Element Inspection 10-17-19 Anchor bolt missing at pier on south girder. - 12/16/2019										
515/2:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0

Structure Number: 09-105-18.0

Notes: Not fully effectiveness. - 12/16/2019

3440/2:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0

Notes: Not fully effective & rust had initiate forming. - 12/16/2019

330/1: Metal Bridge Railing	ft	161	50	80	50	81	0	0	0	0

Notes: Minor misalignment. - 12/16/2019

1000/1: Corrosion	ft	81	0	0	100	81	0	0	0	0

Notes: Minor corrosion on metal bridge rail - 12/16/2019

515/1: Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0

Notes: Not fully protection. - 12/16/2019

3440/1: Eff (Stl Protect Coat)	sq.ft	999	0	0	100	999	0	0	0	0

Notes: Freckle rust has formed on railing. - 12/16/2019

331/1: Re Conc Bridge Railing	ft	161	83	133	16	26	1	2	0	0

Notes: South rail, east end rail has damaged. - 12/16/2019

1080/1: Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0

Notes: Spalling on concrete bridge rail - 12/16/2019

1130/1: Cracking (RC and Other)	ft	26	0	0	100	26	0	0	0	0

Notes: cracks counted in concrete bridge rail - 12/16/2019

6000/3: Scour	each	1	100	1	0	0	0	0	0	0

8401/3: Wings	each	4	100	4	0	0	0	0	0	0

Notes: No defect found. - 12/16/2019

Remarks: Old piling in channel. Vertical curve - West. 6" x 12" yellow pvc end markers all 4 corners. Yellow RPM's on rail end, concrete back walls & diaphragm had cracked. - 12/16/2019

Alert Code 1: Moderate random deck cracking - some soffit efflorescence with rust visible. Minor cracking and spalling of concrete diaphragms. Abutments & pier have minor cracking. Spalling in east abutment, with some small areas of corroded rebar. Anchor bolt missing at pier on south girder. South end of pier cap has moderate cracking & spalling. Paint peeled to base metal - rust evident 45%. East span has had deck patched. Scour under west span. - 12/16/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-105-18.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	CORNELL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00922 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 2 EAST TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.299	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 58' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 36' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	605530.0 5203685.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2013 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	January 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	33.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	10/15/2013
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
10 X 6 X 60" RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-105-18.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	180	82	148	18	32	0	0	0	0
Notes: _										
1010/1:Cracking	ft	32	0	0	100	32	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: New triple 10X6 Box Culvert OCT 18 2017 NEED ICE.

Alert Code 1: Horizontal cracks at top of walls.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-105-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	TOWER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 3 NORTH BUFFALO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 35' 52.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	606679.8 5202329.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	4	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 18 34 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 13 25 Tons
Dk Protect	None	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	21 Tons
Age and Service		Appraisal	
27 Yr Built	1982 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	20 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	January 08, 2018
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/16/2017
49 Structure Length	87.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/16/2018
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-105-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	2,110	0	0	100	2,110	0	0	0	0
1180/1:Abrasion	sq.ft	2,110	0	0	100	2,110	0	0	0	0
111/1:Timber Open Girder	ft	1,056	0	0	100	1,056	0	0	0	0
1160/1:Crack (Timber)	ft	556	0	0	100	556	0	0	0	0
202/3:Steel Column	each	12	0	0	100	12	0	0	0	0
1000/3:Corrosion	each	12	0	0	100	12	0	0	0	0
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
206/3:Timber Column	each	15	0	0	100	15	0	0	0	0
1160/3:Crack (Timber)	each	15	0	0	100	15	0	0	0	0
216/3:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
231/1:Steel Pier Cap	ft	52	0	0	100	52	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
235/1:Timber Pier Cap	ft	131	0	0	0	0	100	131	0	0
332/1:Timb Bridge Railing	ft	177	0	0	97	172	0	0	3	5
1020/1:Connection	ft	20	0	0	100	20	0	0	0	0
1180/1:Abrasion	ft	152	0	0	100	152	0	0	0	0
7000/1:Damage	ft	5	0	0	0	0	0	0	100	5
7362/1:Superstructure Traffic Impact	each	1	0	0	100	1	0	0	0	0
7363/1:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Double B&A end marker at NW corner. Posted 9 tons per axle 21 tons gross. Conduit on west side of bridge. Old pile in channel.

Alert Code 1: Deck planks have varying degrees of deterioration & minor section loss. Minor accumulation of dirt & gravel on abut. caps. Girder no. 1, span 2 & 3 is tipped - possible flood damage. Section loss south abut pile at water line. Erosion behind SW wingwall. Bottom of south backwall exposed. Floor braces loose on span 2, 1 missing on span 3.

Alert Code 2: All timber caps are split, cap 4 is also crushing.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-105-22.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	TOWER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00930 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST OF BUFFALO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.500	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 36' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	605889.2 5197177.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	480 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	January 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	53.15 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	49.5 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	50.9 Ft.	213 Federal Aid Project Number	CER-0930(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUADRUPLE, 12X8X51' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-105-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	203	64	129	37	74	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	24	0	0	100	24	0	0	0	0
1130/3:Cracking (RC and Other)	ft	50	0	0	100	50	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Channel has moderate vegetation growth. Dbl. B&a end markers on approach. Corners. Vertical curve - west. 'do not pass' both directions. Minor concrete deterioration throughout structure. moderate embankment erosion - NW and SW quadrants. 10/18/2010 - Small spall at west side of 2nd box at south end with rebar exposed.

Alert Code 1: Minor to moderate cracking in parapet & roof - north side. efflorescence is visible. roof construction joint - barrel no. 1 & 3 are leaking & have minor deterioration. 6" silt accumulation in center 2 barrels.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-105-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	80.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	TOWER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH 2 WEST BUFFALO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 35' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	606783.7 5194749.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 26 47 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 15 28 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	10 30 Year of ADT 2020	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 16, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.9 Ft.	Other Special	N
48 Length of Max Span	39 Ft.	218 Channel Profile	1 48 05/16/2017
49 Structure Length	41.01 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	06/21/2016
51 Bridge Rdwy Width - Curb to Curb	24.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-105-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,066	0	0	100	1,066	0	0	0	0
1020/1:Connection	sq.ft	166	0	0	100	166	0	0	0	0
Notes:Laminated deck has pulled apart 1"-2" at 4 locations. - 12/16/2019										
1180/1:Abrasion	sq.ft	900	0	0	100	900	0	0	0	0
Notes:Minor wear on deck - 12/16/2019										
107/1:Steel Opn Girder/Beam	ft	203	0	0	100	203	0	0	0	0
1000/1:Corrosion	ft	203	0	0	100	203	0	0	0	0
Notes:girders have minor to moderate rust. - 12/16/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has completely failed - 12/16/2019										
202/3:Steel Column	each	12	0	0	0	0	100	12	0	0
1000/3:Corrosion	each	12	0	0	0	0	100	12	0	0
Notes:moderate to heavy piling rust - minor section loss. - 12/16/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/3:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has completely failed - 12/16/2019										
216/3:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
1150/3:Check/Shake	ft	52	0	0	100	52	0	0	0	0
Notes:minor weathering checks in timber abutments - 12/16/2019										
231/1:Steel Pier Cap	ft	52	0	0	100	52	0	0	0	0
1000/1:Corrosion	ft	52	0	0	100	52	0	0	0	0
Notes:minor corrosion on steel pier caps - 12/16/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has completely failed - 12/16/2019										
332/1:Timb Bridge Railing	ft	82	0	0	100	82	0	0	0	0
1160/1:Crack (Timber)	ft	82	0	0	100	82	0	0	0	0
Notes:Minor cracking in timber bridge rail - 12/16/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Laminated deck has pulled apart 1"-2" at 4 locations. 2' - 3' deep scour under structure. girders have minor to moderate rust. moderate to heavy piling rust - minor section loss. Minor erosion behind nw wingwall. Minor flood debris hung up in superstructure. Old timber pile in channel. - 12/16/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-105-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HILL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 6 NORTH OF ALICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 36' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	606115.7 5189112.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2006 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	July 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.5 Ft.	Underwater	N
48 Length of Max Span	54 Ft.	Other Special	N
49 Structure Length	133.86 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	10/26/2006
	28.5 Ft.	213 Federal Aid Project Number	BRO-0009(031)
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-105-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	5,154	100	5,154	0	0	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	415	100	415	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	520	100	520	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	67	100	67	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	75	100	75	0	0	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	5	100	5	0	0	0	0	0	0
312/1:Enclosed Bearing	each	24	100	24	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	268	89	238	11	30	0	0	0	0
7000/1:Damage	ft	268	89	238	11	30	0	0	0	0
Notes:Traffic impact to metal bridge rail - 7/8/2019										
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor erosion at SE ditch. Silt accumulation south of structure has vegetation growth that is restricting the channel. Minor gravel on bridge deck. - 7/8/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-105-27.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HILL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 7 NORTH OF ALICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 35' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	606874.2 5190010.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1998 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	January 09, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	57.7 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	41.01 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	58.1 Ft.	213 Federal Aid Project Number	TB9803
52 Deck Width	58.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
TRIPLE, 12X10X60' PRECAST RCB			

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-105-27.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	180	97	175	3	5	0	0	0	0
1010/3:Cracking	ft	5	0	0	100	5	0	0	0	0
8398/3:Slope Protection	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Single B&A end markers at NE, NW, & SW corners. Moderate channel vegetation.

Alert Code 1: NE wingwalls have spalled.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-105-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	75.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	CLIFTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 2 NORTH ALICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 47' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 36' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	606298.9 5182700.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 23 42 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 13 25 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 16, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	37 Ft.	218 Channel Profile	1 48 05/17/2017
49 Structure Length	41.99 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	06/21/2016
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	2-Inspection Incomplete
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-105-31.0

Structure Number: 09-105-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,076	95	1,022	5	54	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	54	0	0	100	54	0	0	0	0
Notes:Random deck cracking with soffit efflorescence visible. - 12/16/2019										
107/1:Steel Opn Girder/Beam	ft	253	35	88	65	165	0	0	0	0
Notes:Corrosion. - 12/16/2019										
1000/1:Corrosion	ft	165	0	0	100	165	0	0	0	0
Notes:Paint peeled to base metal - rust evident 65% of surface area. - 12/16/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	35	350	65	649	0	0
Notes:Steel protective coating had no fully effectiveness. - 12/16/2019										
3420/1:Peel/Bub/Crack(Stl Protect Co	sq.ft	999	0	0	35	350	65	649	0	0
Notes:Paint peeled to base metal - chalked & rust evident 65% of surface area. - 12/16/2019										
215/3:Re Conc Abutment	ft	43	0	0	56	24	44	19	0	0
Notes:Horizontal, 1" vertical cracked on east abutment. - 12/16/2019										
1130/3:Cracking (RC and Other)	ft	19	0	0	0	0	100	19	0	0
Notes:1" wide vertical crack down the center of the east abutment. - 12/16/2019										
1190/3:Abrasion(PSC/RC)	ft	23	0	0	100	23	0	0	0	0
Notes:Abuts have minor to moderate random cracking & scaling. Both abutment has a spall under beam seat girder # 1 & # 6. - 12/16/2019										
6000/3:Scour	ft	1	0	0	100	1	0	0	0	0
Notes:Minor scour under structure. - 12/16/2019										
313/1:Fixed Bearing	each	12	67	8	33	4	0	0	0	0
Notes:Girder #1 & # 6 on both abutment had spall at the beam seat. - 12/16/2019										
1000/1:Corrosion	each	12	67	8	33	4	0	0	0	0
Notes:Paint peeled to base metal - rust evident 65% of surface area & spall under beam seat #1 & # 6. - 12/16/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:not Fully protection. - 12/16/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Paint peeled to base metal - rust evident 65% of surface area. - 12/16/2019										
330/1:Metal Bridge Railing	ft	79	60	47	41	32	0	0	0	0
Notes:Protective coating had failed. - 12/16/2019										
1000/1:Corrosion	ft	32	0	0	100	32	0	0	0	0
Notes:Paint peeled to base metal - rust evident 65% of surface area. - 12/16/2019										
515/1:Steel Protective Coating	sq.ft	999	60	600	40	399	0	0	0	0
Notes:No longer effectiveness. - 12/16/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	999	60	600	40	399	0	0	0	0
Notes:Paint peeled to base metal - rust evident 65% of surface area. - 12/16/2019										
331/1:Re Conc Bridge Railing	ft	85	92	78	8	7	0	0	0	0
1130/1:Cracking (RC and Other)	ft	7	0	0	100	7	0	0	0	0
Notes:Random cracking throughout. - 12/16/2019										

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SEC 409

Structure Number: 09-105-31.0

8398/3:Slope Protection	each	4	0	0	0	0	50	2	50	2
Notes:erosion be hind wingwall s. - 12/16/2019										
2210/3:Movement	each	4	0	0	0	0	50	2	50	2
Notes:Minor scour around both sides of all wing walls, 2 sides are missing. - 12/16/2019										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
Notes:Cracked. - 12/16/2019										
1130/3:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:Abutments had diagonal cracked throughout wings - 12/16/2019										
6000/3:Scour	each	3	0	0	100	3	0	0	0	0
Notes:Minor scour around both sides of all wings. - 12/16/2019										

Remarks: Horizontal curve - west. Sharp vertical curve - east. Signed Curve & 25 mph both directions. PVC marker at SW ,
Se bank has lateraled movement (slides). - 12/16/2019

Alert Code 1: Abuts have minor to moderate random cracking & scaling. Minor scour under structure. Random deck cracking with soffit efflorescence visible. West abutment has a spall under the north girder. Paint peeled to base metal - rust evident 65% of surface area. - 12/16/2019

Alert Code 2: 1" wide vertical crack down the center of the east abutment. - 12/16/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-105-33.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	79.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	CLIFTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00944 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST OF ALICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.400	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 45' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 36' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	606281.9 5179452.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	57 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	34 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	35 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1954 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	150 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	3 SC - Unstable
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 16, 2019
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	40 Ft.	218 Channel Profile	1 48 05/17/2017
49 Structure Length	83.99 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	09/19/2011
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	2-Inspection Incomplete
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 09-105-33.0

Structure Number: 09-105-33.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	7,083	95	6,729	5	333	0	21	0	
1080/1:Delamination/Spall/Patched Area	sq.ft	333	0	0	100	333	0	0	0	
Notes:Soffit is spalled at deck drains with exposed rebar & section loss. - 12/16/2019										
1090/1:Exposed Rebar	sq.ft	21	0	0	0	0	100	21	0	
Notes:Soffit is spalled at deck drains with exposed rebar & section loss. - 12/16/2019										
510/1:Wearing Surfaces	sq.ft	7,083	95	6,729	0	0	5	354	0	
3210/1:Del/Spall/Patch/Pot(Wear Sur)	sq.ft	354	0	0	0	0	100	354	0	
Notes:Asphalt overlay is cracked & spalling throughout the deck. - 12/16/2019										
107/1:Steel Opn Girder/Beam	ft	341	15	51	85	290	0	0	0	
1000/1:Corrosion	ft	290	0	0	100	290	0	0	0	
Notes:Paint peeling to base metal - rust evident - 85% of surface area. - 12/16/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	15	150	85	849
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	999	0	0	0	0	15	150	85	849
Notes:Paint peeling to base metal - rust evident - 85% of surface area. - 12/16/2019										
210/3:Re Conc Pier Wall	ft	26	0	0	100	26	0	0	0	
1130/3:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	
Notes:Minor random cracks. - 12/16/2019										
6000/3:Scour	ft	23	0	0	100	23	0	0	0	
Notes:Minor scour under structure. - 12/16/2019										
215/3:Re Conc Abutment	ft	59	56	33	44	26	0	0	0	
1130/3:Cracking (RC and Other)	ft	6	0	0	100	6	0	0	0	
Notes:Minor random cracking. - 12/16/2019										
6000/3:Scour	ft	20	0	0	100	20	0	0	0	
Notes:Minor scour under structure. - 12/16/2019										
234/1:Re Conc Pier Cap	ft	26	77	20	0	0	23	6	0	
1080/1:Delamination/Spall/Patched Area	ft	6	0	0	0	0	100	6	0	
Notes:Pier cap has moderate spalling under Beams 2 & 3, exposing the west bearing plate of Beam 2 and the east bearing plate of Beam 3. - 12/16/2019										
301/1:Pourable Joint Seal	ft	26	0	0	0	0	0	0	100	26
2320/1:Seal Adhesion	ft	26	0	0	0	0	0	0	100	26
Notes:Seal is no longer in place. - 12/16/2019										
330/1:Metal Bridge Railing	ft	171	50	86	50	85	0	0	0	
1000/1:Corrosion	ft	85	0	0	100	85	0	0	0	
Notes:Paint peeling to base metal - rust evident - 85% of surface area. - 12/16/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	50	500	0	0	50	499
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	50	500	0	0	50	499
Notes:Paint peeling to base metal - rust evident - 85% of surface area. - 12/16/2019										
331/1:Re Conc Bridge Railing	ft	171	0	0	100	171	0	0	0	
1190/1:Abrasion(PSC/RC)	ft	171	0	0	100	171	0	0	0	
Notes:Surface aggregate is exposed with minor spalls & cracks. - 12/16/2019										

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8401/2:Wings	each	4	0	0	100	4	0	0	0	0
6000/2:Scour	each	4	0	0	100	4	0	0	0	0
Notes:Minor erosion in front of wingwalls. - 12/16/2019										

Remarks: Yellow PVC end markers on all corners. Vertical curves both directions. Channel aggregation under structure. - 12/16/2019

Alert Code 1: Minor diaphragm spalling at abutments and pier. Minor scour under structure. Soffit is spalled at deck drains with exposed rebar. Moderate erosion in SW & NE quadrants. Minor erosion in front of wingwalls. Paint peeling to base metal - rust evident - 85% of surface area. - 12/16/2019

Alert Code 2: Pier cap has moderate spalling under Span 1 Beams 2 & 3, exposing the west bearing plate of Beam 2 and the east bearing plate of Beam 3. - 12/16/2019

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Structure Number: 09-105-34.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	63.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	CLIFTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 1 SOUTH OF ALICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 44' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 37' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	605562.1 5177826.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 14 25 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 10 19 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	17 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed	2013	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	2019	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.3 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	41.01 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	212 Structure Load Rated	06/21/2016
52 Deck Width	24.3 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevold, Finton, Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Structure Number: 09-105-34.0

Structure Number: 09-105-34.0

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Structure Number: 09-105-34.0

8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Moderate erosion behind NW & SW wingwalls. Minor channel scour. Sharp vert. Curve - west.
Heavy embankment erosion - sw quadrant. Posted 7 tons per axle, 17 tons gross. Flanges of Pile #'s 1,2,4,&5 in
east abutment are bent. - 10/23/2019

Alert Code 1: Moderate girder rust. Substructure has varying degrees of cracking. Abut 1 cap at pile 1 cracked. -
10/23/2019

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Structure Number: 09-105-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	57.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	CLIFTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 2 SOUTH OF ALICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 37' 07.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	605544.6 5176219.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 11 19 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 8 15 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	18 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 17, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 05/17/2017
49 Structure Length	41.01 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	06/21/2016
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-105-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,055	95	1,001	5	54	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	54	0	0	100	54	0	0	0	0
Notes:random cracking in deck - 12/17/2019										
107/1:Steel Opn Girder/Beam	ft	203	0	0	100	203	0	0	0	0
Notes:Rust & damaged. - 12/17/2019										
1000/1:Corrosion	ft	153	0	0	100	153	0	0	0	0
Notes:Corrosion. - 12/17/2019										
1900/1:Distortion	ft	50	0	0	100	50	0	0	0	0
Notes:Girder # 4 had twisted. - 12/17/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Steel protective coating had no longer effectiveness. - 12/17/2019										
215/3:Re Conc Abutment	ft	52	79	41	21	11	0	0	0	0
Notes:Incomplete Element Inspection 10/16/19 - 12/17/2019										
1090/3:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
Notes:East abutment had piling exposed (abutment wall). - 12/17/2019										
1130/3:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes:hair lines cracked on both abutments. - 12/17/2019										
330/1:Metal Bridge Railing	ft	82	98	80	2	2	0	0	0	0
Notes:East end raps had bent. - 12/17/2019										
1900/1:Distortion	ft	2	0	0	100	2	0	0	0	0
Notes:SE & NE rail had bent. - 12/17/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Not fully protective. - 12/17/2019										
331/1:Re Conc Bridge Railing	ft	82	98	80	2	2	0	0	0	0
Notes:East end rail has bent. - 12/17/2019										
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
Notes:Minor scour on downstream of the structure. - 12/17/2019										
7362/1:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
7363/1:Steel Section Loss	each	1	100	1	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
Notes:Rip rap slides to th channel. - 12/17/2019										
8401/3:Wings	each	4	0	0	0	0	100	4	0	0
Notes:Wings had Moderately cracked - 12/17/2019										

Remarks: NBI Remarks: 6"x12" marker on SW/ NW & SE corners, Vert curve to east. Channel erosion -. Posted for 8 Tons/Axle, 18 Tons Gross. West end of steel railing have minor distortion. - 12/17/2019

Alert Code 1: Paint peeled to base metal. Rust Evident 75%. Abutments are cracked and spalled at the beamseats. Spalling & delamination at SE corner of deck with rebar showing. Wingwalls have large cracks and sections of concrete missing. - 12/17/2019

Alert Code 2: Girder # 4 has distorted & 1" gap underside deck. - 12/17/2019

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Structure Number: 09-105-42.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	PONTIAC TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH OF ENDERLIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 38' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 37' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	605743.9 5166194.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	4 Low Slump Concrete	64 Oper. Rating	HS 47 85 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 21 38 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2014 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	50 Ft.	Other Special	N
49 Structure Length	150.00 Ft.	218 Channel Profile	1 48 05/28/2015
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	10/22/2014
	28.0 Ft.	213 Federal Aid Project Number	BRO-0009(043)
52 Deck Width	30.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 09-105-42.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,500	99	4,465	1	35	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	15	0	0	100	15	0	0	0	0
Notes:Efflorescence on the underside of deck - 10/3/2019										
1130/1:Cracking (RC and Other)	sq.ft	20	0	0	100	20	0	0	0	0
Notes:Random cracking throughout deck - 10/3/2019										
520/1:Conc Re Prot Sys	sq.ft	4,500	100	4,500	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	600	100	600	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	58	100	58	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	60	100	60	0	0	0	0	0	0
310/1:Elastomeric Bearing	each	16	100	16	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	300	100	300	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Speed limit 40 MPH in both directions. Deck has minor abrasion. Minor random deck cracking with efflorescence visible. Minor erosion behind SE & SW wing walls. - 10/3/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-105-42.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	PONTIAC TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH OF ENDERLIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 38' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 36' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	606112.8 5165385.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2010 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	January 09, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	50.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/28/2011
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	tb0903
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 6 X 12 X57' PRECAST RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-105-42.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	114	95	108	5	6	0	0	0	0
Notes:_										
1010/3:Cracking	ft	6	0	0	100	6	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Single B/A in 4 corners, Concrete grout sealing between 2 boxes on westside are breaking off.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-106-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	TOWER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 3 NORTH TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 35' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	607147.0 5202018.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	January 17, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	45.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/23/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0009(046)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
TRIPLE 14 X 11 X 50 PCBC		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-106-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	150	93	140	7	10	0	0	0	0
1130/3:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: A B/A markers in all corners , Misalignment & separation up to 1-1/2".

Alert Code 1: Box # 1 west wall roof/ chamfer have hairline cracking almost entire length of the box , Box # 3(east wall) , sect # 4 has hairline cracking at roof & chamfer

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-106-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	TOWER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 2 SOUTH TOWER CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 27.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 35' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	606973.9 5193975.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1945 106 Yr Reconstructed	1977	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	6 Equal Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	-1.00	71 Waterway Adequacy	8 Equal Desirable
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	6 Equal Min Criteria
Geometric Data		36 Traffic Safety Features	N N 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	8 Stable Above Footing
32 Approach Roadway Width	16 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	December 19, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	19.7 Ft.	Fracture Critical	N
48 Length of Max Span	13 Ft.	Underwater	N
49 Structure Length	27.89 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	218 Channel Profile	N
	0.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	207 Transporter Erector Routes and Sites	-1
52 Deck Width	0.0 Ft.	212 Structure Load Rated	01/01/1901
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Nguyen, Finton
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
DOUBLE, 12-8X8-1X36' CMPA		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-106-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	72	0	0	100	72	0	0	0	0
Notes:Minor rusted and deformed. - 12/19/2019										
1000/3:Corrosion	ft	36	0	0	100	36	0	0	0	0
Notes:Light rust entirely units. - 12/19/2019										
1900/3:Distortion	ft	36	0	0	100	36	0	0	0	0
Notes:Both units has minor deformed. - 12/19/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Not effectiveness. - 12/19/2019										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
Notes:Erosion both ends of structure. - 12/19/2019										
2210/3:Movement	each	2	0	0	100	2	0	0	0	0
Notes:both Slopes rip rap had displaced - 12/19/2019										

Remarks: Minor channel scour - south. Moderate channel vegetation. Sharp vertical curve - west. West side of east pipe has minor distortion which appears to have stabilized. Minor riprap displacement south. North side of culverts have a concrete headwall / footing that is starting to break down. The north end of the culverts are higher than the middle - west about 1', east about 2' - 12/19/2019

Alert Code 1: Pipes have minor deformation. Minor erosion at SE corner of structure. Culverts have minor freckle rust throughout. - 12/19/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-110-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HOWES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 2 NORTH EMBDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 26' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	614531.8 5187634.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	22.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/06/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	TB1609
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevoid, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 10 X 4 X 36' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-110-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	72	67	48	33	24	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes:E box segment 3 and 4 spalled. W box segment 4, 5, 7 and 8 spalled. - 10/9/2019										
1130/3:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
Notes:Minor hairline cracking in box walls - 10/9/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Markers on all corners. E box segment 3 and 4 spalled. W box segment 4, 5, 7 and 8 spalled. parapet has cracks - 10/9/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-110-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City		37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 0 None of tl	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 N 3 E OF ALICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 29' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	614923.9 5187562.2	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1992 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	98 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	05/02/2012
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	98 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevold, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	0.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 10 X 4 X 36'		116 Minimum Navigation Vertical Clearance	0 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-110-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	72	72	52	28	20	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:Spalling North box ceiling, East side - 10/9/2019										
1120/1:Efflorescence/Rust Staining	ft	17	0	0	100	17	0	0	0	0
Notes:Random spots of rust staining on box walls - 10/9/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 05/09/2013 - SW corner of box has minor erosion and a pile of concrete chunks. Minor misalignment of precast sections. - 10/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-110-39.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HIGHLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 6 SOUTH OF ALICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 40' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 29' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	615224.0 5170654.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 24 43 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 16 29 Tons
208 Dk Overburden	202 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1950 106 Yr Reconstructed	1992	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	5 Above Min Tolerable
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	20 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	-1.00	71 Waterway Adequacy	6 Equal Minimum
19 Bypass, Detour Length	4 Miles	72 App. Rdwy. Alignment	5 Above Tolerable
Geometric Data		36 Traffic Safety Features	1 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	18 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	October 30, 2017
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	24.0 Ft.	Fracture Critical	N
48 Length of Max Span	58 Ft.	Underwater	N
49 Structure Length	60.04 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	218 Channel Profile	1 48 05/17/2017
	0.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb		207 Transporter Erector Routes and Sites	-1
	24.0 Ft.	212 Structure Load Rated	06/21/2016
52 Deck Width	25.9 Ft.	213 Federal Aid Project Number	CASS CO. BR. 110-39.1
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-110-39.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,561	100	1,561	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	361	50	180	50	181	0	0	0	0
1000/1:Corrosion	ft	181	0	0	100	181	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	0	0	50	499	50	500	0	0
215/3:Re Conc Abutment	ft	49	0	0	92	45	8	4	0	0
1080/3:Delamination/Spall/Patched Area	ft	21	0	0	100	21	0	0	0	0
1130/3:Cracking (RC and Other)	ft	8	0	0	100	8	0	0	0	0
332/1:Timb Bridge Railing	ft	121	100	121	0	0	0	0	0	0
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Amber end markers at SE, NW, & NE corners, cattle fences run on both side of structure.

Alert Code 1: Heavy embankment erosion nw,ne & moderate scour under structure. Concrete abutments have cracking, spalling, & deterioration. Poor channel alignment. Girder paint peeled to base metal - rust evident - 50% of surface area.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-110-40.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HIGHLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 7 SOUTH OF ALICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 39' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 30' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	614154.9 5168301.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 24 44 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 16 29 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2011 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	December 17, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.0 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	58.00 Ft.	218 Channel Profile	1 48 05/16/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/25/2012
	24.0 Ft.	213 Federal Aid Project Number	FL0902
52 Deck Width	26.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Finton, Czezok, Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-110-40.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,508	66	1,000	34	508	0	0	0	0
Notes:Laminate deck has minor abrasion. - 12/17/2019										
1180/1:Abrasion	sq.ft	508	0	0	100	508	0	0	0	0
Notes:Minor abrasion on deck - 12/17/2019										
111/1:Timber Open Girder	ft	840	90	753	7	58	0	0	4	29
Notes:Check cracked & span 2 / girder #1 had damaged. - 12/17/2019										
1160/1:Crack (Timber)	ft	58	0	0	100	58	0	0	0	0
Notes:Minor Weathering cracked in random girders. - 12/17/2019										
7000/1:Damage	ft	29	0	0	0	0	0	0	100	29
Notes:Span # 2 , girder # 1. - 12/17/2019										
202/1:Steel Column	each	23	100	23	0	0	0	0	0	0
Notes:Incomplete Element Inspection 10/3/19 - 12/17/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Incomplete Element Inspection 10/3/19 - 12/17/2019										
216/1:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
Notes:Incomplete Element Inspection 10/3/19 - 12/17/2019										
231/1:Steel Pier Cap	ft	78	100	78	0	0	0	0	0	0
Notes:Functioning as its intended. - 12/17/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Not fully protective. - 12/17/2019										
332/1:Timb Bridge Railing	ft	121	100	121	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:Rip rap slide to the channel. - 12/17/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
Notes:No defect has found. - 12/17/2019										

Remarks: Amber end markers at all 4 corners. Corrosion has initiated & patched rust forming on steel piles at water level (see a photo) . lateral movement evidence south bank (upstream) & north bank have sloughing .. - 12/17/2019

Alert Code 1: Minor splits in several girders. Girder #'s 7 & 9 in east span have wear. Impact damage to rail at SW corner and north pier pile at water level , Patch rust had initiated at ground level. - 12/17/2019

Alert Code 3: Span 2 , girder # 1 is damaged with section loss which will not capable of carry a full load as its designed. - 12/17/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-111-30.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HOWES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST OF EMBDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 17.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 28' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	616585.6 5184607.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 27 50 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 16 30 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	25 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 17, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.4 Ft.	Other Special	N
48 Length of Max Span	20 Ft.	218 Channel Profile	1 48 05/17/2017
49 Structure Length	22.97 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	06/21/2016
51 Bridge Rdwy Width - Curb to Curb	19.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	21.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-111-30.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	495	100	495	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	207	20	41	80	166	0	0	0	0
Notes:Rusted. - 12/17/2019										
1000/1:Corrosion	ft	166	0	0	100	166	0	0	0	0
Notes:All rusted to the base metal. - 12/17/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:No longer effectiveness. - 12/17/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:No longer effectiveness. - 12/17/2019										
215/3:Re Conc Abutment	ft	43	0	0	100	43	0	0	0	0
Notes:Both abutments had hair lines cracked. - 12/17/2019										
1130/3:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
Notes:Vertical/ horizontal hair lonesco cracked on both abutments - 12/17/2019										
1190/3:Abrasion(PSC/RC)	ft	23	0	0	100	23	0	0	0	0
Notes:North abutment has abrasion at water level. - 12/17/2019										
330/1:Metal Bridge Railing	ft	46	0	0	0	0	0	0	100	46
Notes:Bridge rail is gone - 12/17/2019										
7000/1:Damage	ft	46	0	0	0	0	0	0	100	46
Notes:Metal bridge rail has been sheared off posts - 12/17/2019										
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	46	85	39	15	7	0	0	0	0
1130/2:Cracking (RC and Other)	ft	7	0	0	100	7	0	0	0	0
Notes:Cracking in concrete bridge rail - 12/17/2019										
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
7363/1:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Initially patch rust had forming. - 12/17/2019										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
Notes:Cracked in different sizes. - 12/17/2019										
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:All wingwalls had moderate cracked - 12/17/2019										

Remarks: Vertical curves both directions. PVC markers in all corners , steel railing had no longer unplaced. - 12/17/2019**Alert Code 1:** Scour at SW corner with erosion behind wing wall. Both rails & posts were no longer stand in placed Paint peeled to base metal - rust evident 80% on girders. Minor abutment spalling & deterioration at water line. Shear cracks through all 4 wingwalls. - 12/17/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-111-39.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HIGHLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 5 SOUTH OF ALICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 41' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 28' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	616831.4 5171405.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	K Closed to all traffic
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 43 78 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	0 Bridge closed
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	December 17, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	49 Ft.	Other Special	N
49 Structure Length	149.93 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/16/2018
	27.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-111-39.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	1,201	100	1,201	0	0	0	0	0	0
Notes:Incomplete Element Inspection 10-24-19 - 12/17/2019										
210/3:Re Conc Pier Wall	ft	59	0	0	49	29	51	30	0	0
Notes:Incomplete Element Inspection 10-24-19 - 12/17/2019										
1130/3:Cracking (RC and Other)	ft	59	0	0	49	29	51	30	0	0
Notes:Incomplete Element Inspection 10-24-19 - 12/17/2019										
215/2:Re Conc Abutment	ft	59	90	53	10	6	0	0	0	0
Notes:Incomplete Element Inspection 10-24-19 - 12/17/2019										
1130/2:Cracking (RC and Other)	ft	6	0	0	100	6	0	0	0	0
Notes:Incomplete Element Inspection 10-24-19 - 12/17/2019										
301/2:Pourable Joint Seal	ft	59	0	0	0	0	0	0	100	59
Notes:Incomplete Element Inspection 10-24-19 - 12/17/2019										
2330/2:Seal Damage	ft	59	0	0	0	0	0	0	100	59
Notes:Incomplete Element Inspection 10-24-19 - 12/17/2019										
330/1:Metal Bridge Railing	ft	299	100	299	0	0	0	0	0	0
Notes:Incomplete Element Inspection 10-24-19 - 12/17/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Incomplete Element Inspection 10-24-19 - 12/17/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Incomplete Element Inspection 10-24-19 - 12/17/2019										
331/1:Re Conc Bridge Railing	ft	299	55	163	46	136	0	0	0	0
Notes:Incomplete Element Inspection 10-24-19 - 12/17/2019										
1130/1:Cracking (RC and Other)	ft	136	0	0	100	136	0	0	0	0
Notes:Incomplete Element Inspection 10-24-19 - 12/17/2019										
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
Notes:Incomplete Element Inspection 10-24-19 - 12/17/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Incomplete Element Inspection 10-24-19 - 12/17/2019										

Remarks: NBI Remarks: Amber end markers all 4 corners. Sharp vertical curve-south. Signed road closed ahead 2 and 1 mile south, road subject to flooding 1 mile North. Joint 2 1-1/2" dip, 1-1/8" Separation. Joint 3 2-1/4" dip, 1" Separation. Girder 6 span 3 has spall. random exposed rebar and rust stain on all girders STRUCTURE UNDER WATER 10-24-19 Roadway to structure closed 12-17-19 - 12/17/2019

Alert Code 1: Minor deck spalling at joints. Transverse joints are full of dirt & gravel. Pier 2 has moderate map cracking & 1/4" vertical crack in east side. - 12/17/2019

Alert Code 2: Unsealed transverse deck joints over piers appear to be causing pier deterioration. Pier 3, girder 2, span 3 has a spall and a dark water stain. D-cracking on the east end of pier 2. East end of pier 2 is 1/8" in 2' out of plumb (north to south) & there is an area of spall & exposed rebar at girder no. 8, span 2. West end of pier 3 is out of plumb (north to south) 1/8" in 2'. - 12/17/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-111-42.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HIGHLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 9 SOUTH OF ALICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	0 0	105 Federal Lands Highways	Not applicable
16 Latitude	46d 38' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 28' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	616940.2 5165627.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2014 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 27, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	0 01/01/1901
47 Total Horizontal Clearance	28.0 Ft.	Underwater	0 01/01/1901
48 Length of Max Span	10 Ft.	Other Special	0 01/01/1901
49 Structure Length	21.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	04/09/2015
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 11 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	0.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 10' X 10' X 60' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-111-42.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	122	100	122	0	0	0	0	0	0
Notes: _										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes: _										

Remarks: B&A end markers at all 4 corners. 10/2017: 8' of water in the box.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-113-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	BUFFALO TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 1 SOUTH WHEATLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 27.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 25' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	619621.0 5194222.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2015 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 26, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	02/24/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 12 X 6 X 86' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-113-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	172	98	168	2	4	0	0	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: single B/A in all corners , hair lines cracked in the boxes & moderate vegetation grow.**Alert Code 1:** hair lines cracked in the boxes & moderate vegetation grow

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-113-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HOWES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 2 NORTH EMBDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 26' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	618861.7 5187716.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2015 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/16/2015
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevold, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 12 X 8 X 54' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-113-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	108	100	108	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: Barbed wire attached to N end of box. markers on all corners. - 10/9/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-113-28.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HOWES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH OF EMBDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 25' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	619728.7 5188297.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2013 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	200 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	10/28/2014
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevoid, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
12' X 9' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-113-28.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	108	100	108	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: B & A end markers at all corners. Barbed wire on both ends of the box. - 10/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-113-39.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HIGHLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 6 SOUTH ALICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 40' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 25' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	620044.0 5170719.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2009 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 26, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	45.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	STM-BRO-0009(030)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10'X 10'X 111' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-113-39.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	333	99	328	2	5	0	0	0	0
1130/1:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor misalignment and separation of precast sections. 200' North is a new double box 12' x12' x 77' long.

Alert Code 1: Heavy debris in Box #1. 24-48" silt accumulation in Box #3.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-113-39.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HIGHLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 6 SOUTH OF ALICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 40' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 25' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	620044.7 5170734.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2011 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	25.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/24/2012
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	FL 1103
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevold, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 12' X 12' X 76' RCB		116 Minimum Navigation Vertical Clearance	0 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-113-39.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	152	88	134	12	18	0	0	0	0
1010/1:Cracking	ft	5	0	0	100	5	0	0	0	0
Notes:Hairline cracking in box walls - 10/3/2019										
1080/1:Delamination/Spall/Patched Area	ft	13	0	0	100	13	0	0	0	0
Notes:Minor spalling in roof sections of north box. - 10/3/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Up to 2.5' silt accumulation in both boxes. Minor spalling in roof sections of north box. - 10/3/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-114-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	DOWS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	10 WEST OF HUNTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 11' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 25' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	619386.3 5228085.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 29 53 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	32 Tons
27 Yr Built	1967 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	32.15 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	212 Structure Load Rated	08/07/2017
52 Deck Width	25.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-114-03.0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-114-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
16/1:Re Conc Top Flange	sq.ft	500	100	500	0	0	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	256	98	250	2	6	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Girders have minor random cracking with bottoms of 1,2&6 spalling. - 10/8/2019										
1130/1:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:Girders have minor random cracking with bottoms of 1,2&6 spalling. - 10/8/2019										
202/3:Steel Column	each	14	0	0	100	14	0	0	0	0
1000/3:Corrosion	each	14	0	0	100	14	0	0	0	0
Notes:Varying degrees of piling rust-some heavy with minor section loss. - 10/8/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Protective coating on pile is non-existent - 10/8/2019										
216/3:Timber Abutment	ft	52	0	0	94	49	6	3	0	0
1140/3:Decay/Section Loss	ft	3	0	0	0	0	100	3	0	0
Notes:South end of top plank at east abutment is gone due to fire damage - 10/8/2019										
1150/3:Check/Shake	ft	49	0	0	100	49	0	0	0	0
Notes:Minor weathering of abutment timber - 10/8/2019										
231/1:Steel Pier Cap	ft	52	0	0	100	52	0	0	0	0
1000/1:Corrosion	ft	52	0	0	100	52	0	0	0	0
Notes:Minor corrosion of caps - 10/8/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Coating is non-existent - 10/8/2019										
235/1:Timber Pier Cap	ft	52	0	0	96	50	4	2	0	0
1140/1:Decay/Section Loss	ft	2	0	0	0	0	100	2	0	0
Notes:back side of west cap missing at south end due to fire damage - 10/8/2019										
1150/1:Check/Shake	ft	50	0	0	100	50	0	0	0	0
Notes:Minor weathering of timber caps - 10/8/2019										
330/1:Metal Bridge Railing	ft	66	0	0	94	62	0	0	6	4
1000/1:Corrosion	ft	62	0	0	100	62	0	0	0	0
Notes:Entire rail has corrosion - 10/8/2019										
7000/1:Damage	ft	4	0	0	0	0	0	0	100	4
Notes:East end of north rail has impact damage and is detached from post - 10/8/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Coating is non-existent - 10/8/2019										
331/2:Re Conc Bridge Railing	ft	66	83	55	14	9	3	2	0	0
1090/2:Exposed Rebar	ft	2	0	0	0	0	100	2	0	0
Notes:Minor collision damage NE to rail & curb, spall w/ exposed rebar. - 10/8/2019										
1130/2:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes:Random hairline cracks - 10/8/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0

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SEC 409

Structure Number: 09-114-03.0

8401/3:Wings	each	4	50	2	25	1	25	1	0	0
1140/3:Decay/Section Loss	each	2	0	0	50	1	50	1	0	0
Notes:Minor fire damage to SE wing. Moderate fire damage to SW wing with top plank missing due to the damage - 10/8/2019										

Remarks: Channel has heavy vegetation growth. Salvaged concrete placed for rip rap under bridge. Posted 32 tons both directions. - 10/8/2019

Alert Code 1: Minor fire damage to SE wingwall. Varying degrees of piling rust-some heavy with minor section loss. Erosion may affect roadway shoulder. Minor collision damage NE to rail & curb, spall w/ exposed rebar. Girders have minor random cracking with bottoms of 1,2&6 spalling. - 10/8/2019

Alert Code 2: Moderate fire damage to SW corner of bridge: Top plank of wing and portion of top abutment plank are gone, along with west 1/3 of south 2' of cap. - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-114-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	GILL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BUFFALO STREAM	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 4 NORTH EMBDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 24' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	620988.9 5190985.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 23 42 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 14 25 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1955 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.3 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	07/26/2017
	22.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-114-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	958	100	958	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	240	0	0	100	240	0	0	0	0
Notes:Incomplete Element Inspection 10-24-19 - 10/24/2019										
1000/1:Corrosion	ft	240	0	0	100	240	0	0	0	0
Notes:Incomplete Element Inspection 10-24-19 - 10/24/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	70	700	30	299	0	0
Notes:Incomplete Element Inspection 10-24-19 - 10/24/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	70	700	30	299	0	0
Notes:Incomplete Element Inspection 10-24-19 - 10/24/2019										
215/3:Re Conc Abutment	ft	49	49	24	51	25	0	0	0	0
Notes:Incomplete Element Inspection 10-24-19 - 10/24/2019										
1080/3:Delamination/Spall/Patched Area	ft	25	0	0	100	25	0	0	0	0
Notes:Incomplete Element Inspection 10-24-19 - 10/24/2019										
330/1:Metal Bridge Railing	ft	79	100	79	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Steel protective coating is substantially effective - 10/24/2019										
331/2:Re Conc Bridge Railing	ft	79	91	72	9	7	0	0	0	0
1130/2:Cracking (RC and Other)	ft	7	0	0	100	7	0	0	0	0
Notes:Cracks counted in concrete bridge rail - 10/24/2019										
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
1080/2:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes:Top of SE wingwall is spalled. - 10/24/2019										

Remarks: Paint peeled to base metal - rust evident - 30% of structure. Scour under structure. Waterway degrading. Minor scaling and spalling of abutments at waterline. Top of SE wingwall is spalled. 10-24-19 Due to high water unable to reach underside of structure for inspection. - 10/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-114-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	GILL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 2 NORTH EMBDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 24' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	621307.9 5188184.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2015 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	January 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	38.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/16/2015
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
TRIPLE 12 X 8 X 54' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-114-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	162	100	162	0	0	0	0	0	0
Notes: _										
8399/3:Slope Protection, RC	each	2	100	2	0	0	0	0	0	0
Notes: _										

Remarks: 11/2015: NEW TRIPLE 12'X8' X 54' PRECAST BOX CULVERT.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-114-38.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	WATSON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 5 SOUTH ALICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 41' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 24' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	621313.4 5171647.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 35 64 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 21 39 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	78 Ft.	Other Special	N
49 Structure Length	209.97 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/16/2018
	27.9 Ft.	213 Federal Aid Project Number	BRO-9(11)
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevold, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-114-38.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	6,405	99	6,355	1	50	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	50	0	0	100	50	0	0	0	0
Notes:Random cracking throughout deck - 10/3/2019										
109/1:Pre Opn Conc Girder/Beam	ft	840	100	840	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	66	100	66	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	420	83	348	17	72	0	0	0	0
1130/2:Cracking (RC and Other)	ft	72	0	0	100	72	0	0	0	0
Notes:Cracks counted in concrete bridge rail - 10/3/2019										
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	0	0	100	2	0	0
2210/3:Movement	each	2	0	0	0	0	100	2	0	0
Notes:Moderate erosion of both banks under structure with holes 3' to 4' deep. - 10/3/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Horizontal curve east. Vertical curve west. No end markers. Signed 'curve' & '30 mph' both directions. Chevrons on se corner. Moderate channel degrading. Guardrail barrier settling. Guardrail off all 4 sides of structure have collision damage. Minor random deck cracking with soffit efflorescence visible. - 10/3/2019

Alert Code 1: Moderate erosion of both banks under structure with holes 3' to 4' deep. - 10/3/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-115-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	WHEATLAND TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH OF ABSARAKA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 23' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	622351.7 5200681.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 27 49 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 19 35 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	20 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	5 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 25, 2019
32 Approach Roadway Width	10 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	25 Ft.	218 Channel Profile	1 48 05/16/2017
49 Structure Length	26.90 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	03/27/2018
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch, Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-115-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	646	0	0	100	646	0	0	0	0
1180/1:Abrasion	sq.ft	646	0	0	100	646	0	0	0	0
Notes:Entire surface has minor wear - 11/25/2019										
111/1:Timber Open Girder	ft	135	59	80	41	55	0	0	0	0
1170/1:Split/Delamination (Timber)	ft	55	0	0	100	55	0	0	0	0
Notes:Girders have large shrinkage cracks on both sides of beams 1,2,4&5. - 11/25/2019										
202/3:Steel Column	each	12	0	0	0	0	100	12	0	0
1000/3:Corrosion	each	12	0	0	0	0	100	12	0	0
Notes:Section loss on all pile at waterline. - 11/25/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Coating is non-existent - 11/25/2019										
216/3:Timber Abutment	ft	56	0	0	100	56	0	0	0	0
1180/3:Abrasion	ft	56	0	0	100	56	0	0	0	0
Notes:Minor weather cracking on abutment planks. - 11/25/2019										
231/1:Steel Pier Cap	ft	56	0	0	100	56	0	0	0	0
1000/1:Corrosion	ft	56	0	0	100	56	0	0	0	0
Notes:Minor rusting of caps. - 11/25/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Coating is non-existent. - 11/25/2019										
235/1:Timber Pier Cap	ft	56	0	0	100	56	0	0	0	0
1180/1:Abrasion	ft	56	0	0	100	56	0	0	0	0
Notes:Minor wearing (weathering) of caps. - 11/25/2019										
332/1:Timb Bridge Railing	ft	52	0	0	100	52	0	0	0	0
1160/1:Crack (Timber)	ft	10	0	0	100	10	0	0	0	0
Notes:Cracking at various locations - 11/25/2019										
1180/1:Abrasion	ft	42	0	0	100	42	0	0	0	0
Notes:Wear throughout the rails - 11/25/2019										
8398/3:Slope Protection	each	1	0	0	0	0	0	0	100	1
Notes:11/2019: Slope protection is underwater. - 11/25/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Double B&A end markers on approach corners & posted 9 ton per axle, 20 ton gross. Rough approaches. Horiz. curve - west. Vert. curve - east. - 11/25/2019

Alert Code 1: Scour under structure. Girders have large shrinkage cracks on both sides of beams 1,2,4&5. Moderate erosion behind wingwalls. Holes at SE (44" deep) & NE (55") corners of backwall may indicate abutment undermining. Channel has heavy vegetation growth & several loads of dirt & rock have been dumped on south side limiting water flow. 4th board down on NE corner of backwall broken. Pile #2 east & #3 west are bent. - 11/25/2019

Alert Code 2: Section loss on all pile at water line. - 11/25/2019

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SEC 409

Structure Number: 09-116-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	DOWS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 WEST 2 NORTH HUNTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 13' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 22' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	623004.2 5231387.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 32 59 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 23 43 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1966 106 Yr Reconstructed	1991	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	5 Above Min Tolerable
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	10 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	-1.00	71 Waterway Adequacy	7 Above Minimum
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	7 Above Min Criteria
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	10 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	November 22, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	26.2 Ft.	Fracture Critical	N
48 Length of Max Span	27 Ft.	Underwater	N
49 Structure Length	28.87 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	218 Channel Profile	1 48 05/21/2019
	0.7 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	26.2 Ft.	207 Transporter Erector Routes and Sites	-1
52 Deck Width	27.2 Ft.	212 Structure Load Rated	01/16/2018
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Finton, Nguyen
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-116-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	797	100	797	0	0	0	0	0	0
156/1:Timber Floor Beam	ft	26	100	26	0	0	0	0	0	0
202/3:Steel Column	each	12	0	0	100	12	0	0	0	0
1000/3:Corrosion	each	12	0	0	100	12	0	0	0	0
515/3:Steel Protective Coating	sq.ft	999	0	0	98	975	2	24	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	975	0	0	100	975	0	0	0	0
7000/3:Damage	sq.ft	24	0	0	0	0	100	24	0	0
216/3:Timber Abutment	ft	56	0	0	100	56	0	0	0	0
1150/3:Check/Shake	ft	56	0	0	100	56	0	0	0	0
235/1:Timber Pier Cap	ft	59	0	0	100	59	0	0	0	0
1150/1:Check/Shake	ft	30	0	0	100	30	0	0	0	0
1900/1:Distortion	ft	29	0	0	100	29	0	0	0	0
332/1:Timb Bridge Railing	ft	59	0	0	100	59	0	0	0	0
1150/1:Check/Shake	ft	59	0	0	100	59	0	0	0	0
Notes:Minor weathering of timber - 11/22/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: PVC marker at NE corner. Rough approaches. Channel has moderate vegetation growth. 9 TON LOAD LIMIT SIGNS REMOVED FROM THIS STRUCTURE. LINE 41 WAS CHANGED TO OPEN SINCE OPERATING RATING IS GREATER THAN 36 TONS. - 11/22/2019

Alert Code 1: Moderate erosion, 4' deep X 1.5' Dia hole behind NW wingwall, exposing backwall. 3' deep X 1' dia hole behind SW wingwall. West abutment has split planks in backwall with many separating. Floor beam spalled on SE side. Bottom of caps are crushing. Minor pile section loss at waterline Straps missing on outer deck planks. - 11/22/2019

Alert Code 2: Abutment caps are rotating, and have slid off steel cap 1/2" at front. - 11/22/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-116-01.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	DOWS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 WEST 3 NORTH OF HUNTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 14' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 22' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	622962.7 5232990.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	08/17/2018
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0009(047)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 12 X 8 X 47' PCRCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-116-01.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	94	100	94	0	0	0	0	0	0
Notes:Minor misalignment and separation of precast culvert sections. - 10/8/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 6/25/2018 - Bridge replaced with a double 12' x 8' RCB in 2018. 12/2018 - Minor misalignment and separation of precast sections. - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-116-15.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	EMPIRE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00921 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 3 NORTH ABSARAKA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	28.494	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 01' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 22' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	624072.8 5209387.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1935 106 Yr Reconstructed	1974	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	6 Equal Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	8 Desirable Criteria
29 ADT	70 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	-1.00	71 Waterway Adequacy	7 Above Minimum
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	8 Equal Desirable Crit
Geometric Data		36 Traffic Safety Features	N N 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	8 Stable Above Footing
32 Approach Roadway Width	26 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	January 22, 2018
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	31.8 Ft.	Fracture Critical	N
48 Length of Max Span	10 Ft.	Underwater	N
49 Structure Length	21.00 Ft.	Other Special	N
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	218 Channel Profile	N
	1.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	32.2 Ft.	207 Transporter Erector Routes and Sites	-1
52 Deck Width	34.1 Ft.	212 Structure Load Rated	01/01/1901
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Nguyen
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
DOUBLE, 10X4X34' RCB		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-116-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	69	0	0	100	69	0	0	0	0
1130/3:Cracking (RC and Other)	ft	69	0	0	100	69	0	0	0	0
331/1:Re Conc Bridge Railing	ft	43	93	40	7	3	0	0	0	0
1130/1:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Double B&A end markers on approach corners. West end has riprap.

Alert Code 1: Minor concrete deterioration at water line. Hole in the outside wall at the NE corner of the floor. Vegetation growth in channel.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-116-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	EMPIRE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF SWAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 1 EAST ABSARAKA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 59' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 22' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	623865.1 5205592.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1966 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	10 Ft.	90 Date of Last Inspection	October 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	15.7 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	21.98 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 11X7X30' MULTI-PLATE		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-116-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	59	92	54	5	3	3	2	0	0
1000/3:Corrosion	ft	2	0	0	0	0	100	2	0	0
Notes:2 plate ends are corroded in west barrel - 10/4/2019										
1020/3:Connection	ft	3	0	0	100	3	0	0	0	0
Notes:3 bolts are missing - 10/4/2019										
515/3:Steel Protective Coating	sq.ft	999	70	700	30	297	0	0	0	2
3440/3:Eff (Stl Protect Coat)	sq.ft	299	0	0	99	297	0	0	1	2
Notes:Minor staining on some of the coating. 2 plate ends in west barrel are corroded - 10/4/2019										
8398/3:Slope Protection	each	4	100	4	0	0	0	0	0	0

Remarks: Double 6"x12" yellow reflectors on sw & ne corners. - 10/4/2019**Alert Code 1:** Channel has heavy timber growth to the north. Barrel ends had been ripped, south mostly gone. 3 bolts missing. 2 plate ends corroding in west barrel. - 10/4/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-116-18.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	EMPIRE TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00921 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 1 NORTH ABSARAKA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	24.795	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 59' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 22' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	624162.9 5205054.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1955 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	180 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X6X32' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-116-18.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	66	77	51	23	15	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	6	0	0	100	6	0	0	0	0
Notes:Efflorescence visible in several areas inside the box - 10/4/2019										
1130/3:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes:Shear crack at NW corner, several others in the box - 10/4/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes:NW wing has hairline crack at barrel connection - 10/4/2019										

Remarks: Double B & A end markers on approach corners. 2 large rocks in north barrel. There is a cattle pass box culvert approximately 1/4 mile south of this structure..Channel is appx. 3' higher than the bottom of the box on both sides - cat tail & grass growth. - 10/4/2019

Alert Code 1: NW wing wall is cracked at the barrel. NW corner have shear cracks, parapets have hair line cracks. Efflorescence showing in side boxes. - 10/4/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-116-20.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	WHEATLAND TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00921 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 2 SOUTH ABSARAKA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	22.995	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 21' 60.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	624302.9 5200714.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1954 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	180 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	January 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	32.15 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10X4X30' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-116-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	89	0	0	100	89	0	0	0	0
1130/3:Cracking (RC and Other)	ft	36	0	0	100	36	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor dirt accumulation in outside barrels, east ends up to 1'. 6" X 8" double b & a end markers on approach corners.

Alert Code 1: Moderate deterioration of concrete walls. Minor scour, 1' at west end center barrel. Spall on SE parapet. headwall has 30 cracked , box have 36 cracked.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-116-37.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	WATSON TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	9 EAST 4 SOUTH OF ALICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 42' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 22' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	623856.4 5174306.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2008 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	October 27, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	2 Ft.	Other Special	N
49 Structure Length	33.14 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 114"X 42' CMP		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-116-37.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/1:Steel Culvert	ft	126	100	126	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	50	499	50	500	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	500	0	0	100	500	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0
8402/1:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: Triple 114"x 42' CMP's, 11.5' center to center. 4th CMP added to south, not a structure for inspection. Concrete added to back of wall for stabilization - see photo.

Alert Code 1: Banks are sliding at all sides.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-117-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	78.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	EMPIRE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST OF ABSARAKA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 58' 40.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 21' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	624902.8 5203999.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 22 39 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 15 27 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1950	67 Structural Condition	5 Above Min Tolerable
106 Yr Reconstructed	1986	68 Deck Geometry	6 Equal Min Criteria
42 Type of Service	1 Highway - On	69 Underclear. Vert & Horiz	N Not applicable (NBI)
	5 Waterway - Under	71 Waterway Adequacy	7 Above Minimum
28 Lanes on Structure	2	72 App. Rdwy. Alignment	7 Above Min Criteria
29 ADT	20	36 Traffic Safety Features	0 0 0 0
30 Year of ADT	2019	113 Scour Critical	U Unknown Scour
109 Average Daily Truck Traffic	-1.00		
19 Bypass, Detour Length	2 Miles		
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 04, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.3 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 05/16/2017
49 Structure Length	41.01 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/22/2018
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-117-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	1,066	0	0	100	1,066	0	0	0	0
1150/1:Check/Shake	sq.ft	1,066	0	0	100	1,066	0	0	0	0
Notes:Soffit of slab showing various stages of decay. - 10/4/2019										
156/1:Timber Floor Beam	ft	79	67	53	33	26	0	0	0	0
1170/1:Split/Delamination (Timber)	ft	26	0	0	100	26	0	0	0	0
Notes:North side of east floor beam, and other locations have minor splitting - 10/4/2019										
205/3:Re Conc Column	each	10	60	6	40	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:4 are cracked - 10/4/2019										
215/3:Re Conc Abutment	ft	49	0	0	100	49	0	0	0	0
1130/3:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
Notes:Various cracking throughout - 10/4/2019										
1190/3:Abrasion(PSC/RC)	ft	29	0	0	100	29	0	0	0	0
Notes:Wear/disintegration of concrete abutments - 10/4/2019										
234/2:Re Conc Pier Cap	ft	49	82	40	18	9	0	0	0	0
1130/2:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes:Cracks are located in both caps above piles - 10/4/2019										
235/1:Timber Pier Cap	ft	52	0	0	100	52	0	0	0	0
1150/1:Check/Shake	ft	52	0	0	100	52	0	0	0	0
Notes:Minor weathering of timber - 10/4/2019										
332/1:Timb Bridge Railing	ft	82	0	0	100	82	0	0	0	0
1150/1:Check/Shake	ft	82	0	0	100	82	0	0	0	0
Notes:Minor weathering of timber - 10/4/2019										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
2210/3:Movement	each	2	0	0	100	2	0	0	0	0
Notes:Riprap is displaced - 10/4/2019										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
4000/3:Settlement	each	4	0	0	100	4	0	0	0	0
Notes:NE wingwall is separated from backwall-3/4" wide crack & 15" deep gap. Others are cracked and separating. - 10/4/2019										

Remarks: Barbed wire fence across channel attached to north side of structure . - 10/4/2019

Alert Code 1: Timber caps have been shimmed to compensate for abut. settlement. NE wingwall is separating from backwall, 3/4" wide crack & hole 15" deep. All wingwalls are cracked & separating, corroded steel in SW. Minor channel scour-south. Riprap is displaced. Crack in north side of east floor beam. Concrete is all disintegrating. Soffit of slab showing various stages of decay. All timber elements have weather cracking . - 10/4/2019

Alert Code 2: Cracking in both abut caps above piles - 10/4/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-117-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	WHEATLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH OF WHEATLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 58' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625863.6 5203057.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 41 75 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed	1991	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	2019	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	October 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	37 Ft.	Other Special	N
49 Structure Length	39.04 Ft.	218 Channel Profile	1 48 05/16/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	212 Structure Load Rated	01/22/2018
52 Deck Width	24.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-117-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
15/1:Pre Concrete Top Flange	sq.ft	216	100	216	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	272	100	272	0	0	0	0	0	0
205/3:Re Conc Column	each	10	70	7	30	3	0	0	0	0
1130/3:Cracking (RC and Other)	each	3	0	0	100	3	0	0	0	0
Notes:3 cracks - 10/4/2019										
215/3:Re Conc Abutment	ft	56	0	0	86	48	14	8	0	0
1130/3:Cracking (RC and Other)	ft	28	0	0	71	20	29	8	0	0
Notes:Moderate diagonal crack thru east end of south abutment, several other cracks. Horizontal crack at the bottom of the north abutment. - 10/4/2019										
4000/3:Settlement	ft	28	0	0	100	28	0	0	0	0
Notes:Abutments appear to be settling. Measurements taken on the underside of cap at center column show north cap sloping 0.22" down to the west and south is sloped 0.26" down to the east. - 10/4/2019										
234/1:Re Conc Pier Cap	ft	56	79	44	14	8	7	4	0	0
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	0	0	100	3	0	0
Notes:All corners of the caps are spalled - 10/4/2019										
1090/1:Exposed Rebar	ft	1	0	0	0	0	100	1	0	0
Notes:Exposed rebar in the east end of the north cap - 10/4/2019										
1130/1:Cracking (RC and Other)	ft	8	0	0	100	8	0	0	0	0
Notes:Diagonal cracks thru caps at SE & NW ends - 10/4/2019										
235/1:Timber Pier Cap	ft	52	0	0	100	52	0	0	0	0
1140/1:Decay/Section Loss	ft	52	0	0	100	52	0	0	0	0
Notes:Minor decay of caps - 10/4/2019										
331/1:Re Conc Bridge Railing	ft	79	82	65	18	14	0	0	0	0
1190/1:Abrasion(PSC/RC)	ft	14	0	0	100	14	0	0	0	0
Notes:Misc portions have minor wear - 10/4/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Rough approaches. Minor vert curves both directions. Minor channel degradation. - 10/4/2019

Alert Code 1: Diagonal crack thru cap & abut at SE & NW corners, both of these corners are settled. Measurements taken on underside of cap at center column showed north cap sloping 0.22"/ft down to west & south is sloped 0.26"/ft down to east. All corners of concrete cap are spalled with steel exposed on the NE. NW wingwall is cracked on the end. North abut has a horizontal crack at the ground line. - 10/4/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-117-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	80.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	WHEATLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH OF WHEATLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625914.7 5200982.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel continuous	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 27 48 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 16 29 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 04, 2019
32 Approach Roadway Width	10 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.9 Ft.	Other Special	N
48 Length of Max Span	27 Ft.	218 Channel Profile	1 48 05/16/2017
49 Structure Length	51.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	06/22/2016
51 Bridge Rdwy Width - Curb to Curb	24.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-117-20.0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-117-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,356	0	0	96	1,300	4	56	0	0
1020/1:Connection	sq.ft	56	0	0	0	0	100	56	0	0
Notes:Planks are loose at both ends. - 10/4/2019										
1180/1:Abrasion	sq.ft	1,300	0	0	100	1,300	0	0	0	0
Notes:Deck is worn - 10/4/2019										
107/1:Steel Opn Girder/Beam	ft	259	0	0	100	259	0	0	0	0
1000/1:Corrosion	ft	259	0	0	100	259	0	0	0	0
Notes:Girders have moderate rust. - 10/4/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
205/3:Re Conc Column	each	15	53	8	40	6	7	1	0	0
1130/3:Cracking (RC and Other)	each	7	0	0	86	6	14	1	0	0
Notes:South abut pile 4 has moderate cracking. Several others have cracks. - 10/4/2019										
210/2:Re Conc Pier Wall	ft	26	89	23	12	3	0	0	0	0
1130/2:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
Notes:There are 3 cracks in the wall - 10/4/2019										
215/3:Re Conc Abutment	ft	52	0	0	100	52	0	0	0	0
1130/3:Cracking (RC and Other)	ft	26	0	0	100	26	0	0	0	0
Notes:Diagonal cracking in both abutments. Horizontal crack in north abutment. - 10/4/2019										
4000/3:Settlement	ft	26	0	0	100	26	0	0	0	0
Notes:South abutment in breaking away from concrete piles. - 10/4/2019										
234/1:Re Conc Pier Cap	ft	79	86	68	11	9	3	2	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
Notes:Pier cap south side spalled at west girder. - 10/4/2019										
1130/1:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes:Diagonal crack in south abutment cap, and several others - 10/4/2019										
313/2:Fixed Bearing	each	10	0	0	100	10	0	0	0	0
1000/2:Corrosion	each	10	0	0	100	10	0	0	0	0
Notes:They are corroded - 10/4/2019										
515/2:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Paint is gone - 10/4/2019										
332/1:Timb Bridge Railing	ft	85	0	0	71	60	0	0	29	25
1140/1:Decay/Section Loss	ft	60	0	0	100	60	0	0	0	0
Notes:Timber curbs are decayed - 10/4/2019										
7000/1:Damage	ft	25	0	0	0	0	0	0	100	25
Notes:Timber curbs are broken at all 4 ends. - 10/4/2019										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:SE wing pile is broken off - 10/4/2019										
6000/3:Scour	each	3	0	0	100	3	0	0	0	0

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SEC 409

Structure Number: 09-117-20.0

Notes: Moderate erosion behind wings - 10/4/2019

Remarks: First timber deck planks have worn, loosen & Damage , pier cap # 2 has spalled at the west beam seat. - 10/4/2019

Alert Code 1: Moderate erosion behind wingwalls. Girders have moderate rust. Pier cap south side spalling at west girder. SE wing broke off pile. Minor channel debris. Trees in west ditch. Heavy channel vegetation. Bridge rail missing SE, SW & NW. South abutment breaking away from pile. South abut pile 4 has moderate cracking. Bottom of south backwall exposed at east end. NW backwall cracked. Timber pads beneath girders are in varying states of decay. - 10/4/2019

Alert Code 2: 4 ft. Deep scour under structure. Diagonal cracks in south abut & cap, diag & horiz in north. - 10/4/2019

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SEC 409

Structure Number: 09-117-28.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	GILL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00921 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BUFFALO CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH OF WHEATLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	14.197	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	626166.7 5188031.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 44 80 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 26 48 Tons
208 Dk Overburden	32 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	205 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 N N N
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	32.5 Ft.	Underwater	N
48 Length of Max Span	53 Ft.	Other Special	N
49 Structure Length	56.10 Ft.	218 Channel Profile	1 48 05/18/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/22/2018
	32.8 Ft.	213 Federal Aid Project Number	CBRS-0921(52)
52 Deck Width	36.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 09-117-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	335	100	335	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	85	93	79	7	6	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	6	0	0	100	6	0	0	0	0
Notes:Minor spalls on abutments - 10/9/2019										
313/1:Fixed Bearing	each	24	100	24	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	112	82	92	18	20	0	0	0	0
1130/1:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
Notes:Cracks counted in concrete bridge rail - 10/9/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: B & A markers on all corners but the Northeast. No approach railing. Minor abutment spalls. - 10/9/2019

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SEC 409

Structure Number: 09-117-34.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	WALBURG TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00921 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH OF CHAFFEE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 44' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	626321.5 5178446.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1992 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	90 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	55.8 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	56.1 Ft.	213 Federal Aid Project Number	CB9203-0510
52 Deck Width	58.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
DOUBLE, 10X4X66' PRECAST RCB			

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SEC 409

Structure Number: 09-117-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/2:Re Conc Culvert Precast	ft	131	100	131	0	0	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	20	100	20	0	0	0	0	0	0
1130/2:Cracking (RC and Other)	ft	9	100	9	0	0	0	0	0	0
8398/2:Slope Protection	each	4	100	4	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Flexible reflectors at all corners. Hairline cracks on parapet & rust staining in web wall. Minor sagging in middle of box. - 10/4/2019

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SEC 409

Structure Number: 09-117-36.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	WALBURG TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00921 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH OF CHAFFEE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	6.099	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	626388.5 5175253.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 27 49 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1996 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	90 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	October 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	58 Ft.	Other Special	N
49 Structure Length	140.09 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	212 Structure Load Rated	12/17/1996
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	BRC-0921(53)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevoid, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-117-36.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,478	100	4,458	0	20	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	1	0	0	100	1	0	0	0	0
Notes:Bottom of deck is spalled with exposed rebar at second rail post from south along east side. - 10/3/2019										
1130/1:Cracking (RC and Other)	sq.ft	19	0	0	100	19	0	0	0	0
Notes:Random cracking throughout deck - 10/3/2019										
520/1:Conc Re Prot Sys	sq.ft	4,478	100	4,478	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	561	100	561	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	66	100	66	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	279	100	279	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
2210/3:Movement	each	2	0	0	100	2	0	0	0	0
Notes:Minor erosion of slope protection - 10/3/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Moderate embankment erosion. Signed "do not pass" both directions. Vertical curves both directions. Bottom of deck is spalled with exposed rebar at second rail post from south along east side. - 10/3/2019

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SEC 409

Structure Number: 09-118-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	DOWS TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST OF HUNTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 11' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625709.0 5228207.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1955 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	130 30 Year of ADT 2017	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 24, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X4X30' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	59	68	40	32	19	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	19	0	0	100	19	0	0	0	0
331/1:Re Conc Bridge Railing	ft	43	0	0	100	43	0	0	0	0
1130/1:Cracking (RC and Other)	ft	13	0	0	100	13	0	0	0	0
1190/1:Abrasion(PSC/RC)	ft	30	0	0	100	30	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 6"x12" pvc end markers on all corners. Moderate channel vegetation growth to N.

Alert Code 1: Minor cracking & spalling in floor, walls & wings. Some scaling on center wall. Exposed steel in NW wingwall spall.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-06.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	DOWS TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00910 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 3 NORTH OF ARTHUR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	17.196	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 09' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625881.0 5223371.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1956 106 Yr Reconstructed	2002	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	6 Equal Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	N Not applicable (NBI)
29 ADT	525 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	12.00	71 Waterway Adequacy	7 Above Minimum
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	7 Above Min Criteria
Geometric Data		36 Traffic Safety Features	N N 1 1
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	8 Stable Above Footing
32 Approach Roadway Width	24 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	October 25, 2017
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	24.0 Ft.	Fracture Critical	N
48 Length of Max Span	10 Ft.	Underwater	N
49 Structure Length	21.00 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	218 Channel Profile	N
	0.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	207 Transporter Erector Routes and Sites	-1
52 Deck Width	0.0 Ft.	212 Structure Load Rated	01/01/1901
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Finton, Nguyen
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
DOUBLE, 10X4X76' RCB		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	152	86	131	14	21	0	0	0	0
1090/3:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
1130/3:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
Notes: _										
1220/1:Deterioration (Other)	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Box has been extended (both ends) & road widened. B&A & pvc end markers on all corners.

Alert Code 1: Minor random cracking & floor concrete deterioration & leaching throughout original structure. North sections hold water. South center & west wings cracked & spalled.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	ERIE TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 NORTH OF ERIE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 07' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625883.8 5220123.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 27 50 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1945 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	December 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	25.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.6 Ft.	Underwater	N
48 Length of Max Span	27 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/22/2018
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-118-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	743	0	0	100	743	0	0	0	0
Notes:Abrasion. - 12/18/2019										
1180/1:Abrasion	sq.ft	743	0	0	100	743	0	0	0	0
Notes:Slab is worn - 12/18/2019										
156/1:Timber Floor Beam	ft	26	0	0	100	26	0	0	0	0
Notes:Functioning but weathering checked. - 12/18/2019										
1160/1:Crack (Timber)	ft	26	0	0	100	26	0	0	0	0
Notes:Shrinkage cracked. - 12/18/2019										
215/3:Re Conc Abutment	ft	49	0	0	0	0	100	49	0	0
1080/3:Delamination/Spall/Patched Area	ft	40	0	0	0	0	100	40	0	0
Notes:Deteriorated, cracked & tilting. - 12/18/2019										
1130/3:Cracking (RC and Other)	ft	9	0	0	0	0	100	9	0	0
Notes:Moderate to hair lines cracked on both abutments. - 12/18/2019										
235/1:Timber Pier Cap	ft	56	54	30	46	26	0	0	0	0
Notes:Weathering shake / checked - 12/18/2019										
1170/1:Split/Delamination (Timber)	ft	26	0	0	100	26	0	0	0	0
Notes:Weathering checked / shakes. - 12/18/2019										
332/1:Timb Bridge Railing	ft	59	0	0	36	21	51	30	14	8
1140/1:Decay/Section Loss	ft	59	0	0	36	21	51	30	14	8
Notes:Entire rail has varying degrees of decay - 8' section of north rail decayed completely. - 12/18/2019										
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:East abutment has tilting. - 12/18/2019										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: Rough approaches. 4"x6" yellow markers at NW, NE, & SW corners - 12/18/2019

Alert Code 1: Concrete abuts. have random cracking & moderate deterioration. Moderate erosion behind wingwalls. NE wing has exposed rebar. East bearing cap is rotated & split at NE bearing, shimmering on north 1/2 of cap. Timber curbs are decayed-8' section of north curb decayed completely. - 12/18/2019

Alert Code 2: East abut is out of plumb 1 3/4" in 2' - top is tipping in 10/13: 2 1/2", 03/09/2016 Temp 25F 2.0"x2.0 feet. Dec 18 2019 no change on measured. - 12/18/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-09.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	87.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	ERIE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00914 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST OF ERIE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.400	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 06' 29.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	626188.1 5218519.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 29 52 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 17 31 Tons
208 Dk Overburden	201 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1953 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	120 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	January 18, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	07/26/2017
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	786	0	0	100	786	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	279	0	0	100	279	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
215/3:Re Conc Abutment	ft	52	54	28	46	24	0	0	0	0
1130/3:Cracking (RC and Other)	ft	24	0	0	100	24	0	0	0	0
330/1:Metal Bridge Railing	ft	62	0	0	100	62	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
331/2:Re Conc Bridge Railing	ft	62	89	55	11	7	0	0	0	0
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Yellow 6" x 12" PVC end markers on all corners.**Alert Code 1:** Moderate channel scour. Minor water intrusion at tie holes. Pot holes in gravel at east end of deck, undermining? 2" square hole at west end of deck from wood forms.**Alert Code 2:** 3-4' deep scour under structure.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	ERIE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH 2 EAST OF ERIE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 05' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625757.2 5216892.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1992 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	35.8 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	34.12 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14-1X8-9X41-10 SPPA		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-118-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	85	35	30	65	55	0	0	0	0
1000/3:Corrosion	ft	15	0	0	100	15	0	0	0	0
Notes:Minor corrosion starting at splices. - 10/8/2019										
1900/3:Distortion	ft	40	0	0	100	40	0	0	0	0
Notes:Culverts appear to have 1' of vertical distortion in the center of both culverts. - 10/8/2019										
515/3:Steel Protective Coating	sq.ft	100	83	83	17	17	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	17	0	0	0	0	100	17	0	0
Notes:Minor corrosion starting at splices - coating no longer affective in these areas. - 10/8/2019										
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: Minor channel erosion & vegetation growth. Horizontal curves both directions. History of high water levels.OCT 10 2017 NEED ICE. 10/2019: 2' clearance, able to inspect upper portion of pipes. - 10/8/2019

Alert Code 1: Culverts appear to have 1' of distortion or settlement in the center of both culverts. Minor corrosion starting at splices.10/15 - 10/8/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	ERIE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 3 SOUTH OF ERIE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 04' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	626050.4 5215290.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 27 50 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	14.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	26.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	0.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 12' X 9' Precast RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	138	100	138	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: 8/1/2019 - Bridge replaced with a double 9' x 12' Precast RCB in 2018. - 10/8/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	ERIE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 4 SOUTH OF ERIE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 03' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 40.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625708.1 5213676.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 10, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	9.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	26.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	12/14/2018
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	0.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 12 X 9 X 62' Precast RCBC		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	124	100	124	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 6/25/2018 - Bridge replaced with a double 9' x 12' RCB in 2018. 66'x26' - 6/10/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	EMPIRE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00918 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST OF AYR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	16.197	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 03' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625950.8 5212078.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	480 30 Year of ADT 2017	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	October 25, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X10X96' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	194	90	174	10	20	0	0	0	0
Notes: _										
1020/1:Connection	ft	10	0	0	100	10	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
1090/1:Exposed Rebar	ft	6	0	0	100	6	0	0	0	0
8398/2:Slope Protection	each	4	0	0	0	0	0	0	100	4
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 6" x 12" markers on all four corners. PRECAST CONCRETE CULVERT.

Alert Code 1: Minor channel debris. Joints are open 1/2" to 1 1/2". Roof joints are leaking. Minor erosion around all wings. SE corner is washed out from PVC culvert. Multiple sections misaligned up to 3/4" & spalled on roof with exposed rebar.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	EMPIRE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST OF AYR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 02' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	626359.7 5210470.8	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2011 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	0 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 25, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	50.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/28/2011
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	TB0705
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 12 ' X 10 ' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	79	100	79	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B&A end markers at all corners. Beaver dam north & south of box.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	WHEATLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 3 NORTH WHEATLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 50.00"	112 NBIS Bridge Length	No
GPS Coordinates XY	627017.2 5202395.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2017 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	9 Ft.	Other Special	N
49 Structure Length	20.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	09/26/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 9 X 9 X 36 RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	72	83	60	17	12	0	0	0	0
1130/1:Cracking (RC and Other)	ft	12	0	0	100	12	0	0	0	0
Notes:Minor hairline cracking at roof & chamfers - 10/4/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: New in 2017 . A single B/A at all corners. - 10/4/2019

Alert Code 1: Minor hair line cracking at roof & chamfers & minor misalignment / separation between precast sections. - 10/4/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	78.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	WHEATLAND TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST NORTH WHEATLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	627518.5 5200932.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 21 38 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 14 27 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	24 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 10, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.9 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/21/2019
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/22/2018
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-118-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	657	0	0	100	657	0	0	0	0
1150/1:Check/Shake	sq.ft	657	0	0	100	657	0	0	0	0
Notes:Timber is weathered - 6/10/2019										
111/1:Timber Open Girder	ft	125	0	0	58	73	42	52	0	0
1160/1:Crack (Timber)	ft	2	0	0	0	0	100	2	0	0
Notes:East girder is cracked at north abutment - 6/10/2019										
1170/1:Split/Delamination (Timber)	ft	123	0	0	59	73	41	50	0	0
Notes:Minor splitting of girders, exterior girders have wider splits. - 6/10/2019										
206/3:Timber Column	each	12	0	0	50	6	50	6	0	0
1170/3:Split/Delamination (Timber)	each	12	0	0	50	6	50	6	0	0
Notes:Piles 1,2,4&5 south, and 1&4 north have moderate splits, remaining have minor splits. - 6/10/2019										
216/3:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
1020/3:Connection	ft	12	0	0	100	12	0	0	0	0
Notes:Bottom planks of both abutments have separated due to being exposed. - 6/10/2019										
1150/3:Check/Shake	ft	40	0	0	100	40	0	0	0	0
Notes:Weathering throughout abutment planks. - 6/10/2019										
235/1:Timber Pier Cap	ft	52	0	0	89	46	12	6	0	0
1150/1:Check/Shake	ft	46	0	0	100	46	0	0	0	0
Notes:Weathering of both caps - 6/10/2019										
1170/1:Split/Delamination (Timber)	ft	6	0	0	0	0	100	6	0	0
Notes:Caps are split at NW, NE, and SE corners. - 6/10/2019										
332/2:Timb Bridge Railing	ft	49	0	0	71	35	29	14	0	0
1140/2:Decay/Section Loss	ft	49	0	0	71	35	29	14	0	0
Notes:Decay throughout the rails - 6/10/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
6000/3:Scour	each	2	0	0	100	2	0	0	0	0
Notes:Erosion behind NE and SW wings - 6/10/2019										

Remarks: Vert curves both directions. Heavy vegetation growth in channel. - 6/10/2019**Alert Code 1:** Girders have shrinkage cracks. wash -out at NE & SW corners behind wings. All the timber elements have minor to moderate weather cracking. - 6/10/2019**Alert Code 2:** Bottom planks of both abutments are exposed and separating. scour under structure. NE girder corner broken. South pile 1,2,4&5 & north pile 1&4 are cracked & split. Caps are cracked in NW,NE& SE corners & appear to be tipping out. Tie back bolts loose on cap north #5, south #2&5, & north pile #3&4. - 6/10/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-20.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	68.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	WHEATLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 4 NORTH WHEATLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	627485.2 5202170.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 31 56 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 18 34 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed	1963	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	2019	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	20 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	1 48 05/21/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.9 Ft.	212 Structure Load Rated	06/22/2016
52 Deck Width	25.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-118-20.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	624	0	0	100	624	0	0	0	0
1180/1:Abrasion	sq.ft	624	0	0	100	624	0	0	0	0
Notes:Deck is worn - 10/4/2019										
107/1:Steel Opn Girder/Beam	ft	121	0	0	100	121	0	0	0	0
1000/1:Corrosion	ft	121	0	0	100	121	0	0	0	0
Notes:Girders are corroded - 10/4/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Paint is not effective - 10/4/2019										
215/3:Re Conc Abutment	ft	43	0	0	79	34	21	9	0	0
1080/3:Delamination/Spall/Patched Area	ft	8	0	0	0	0	100	8	0	0
Notes:Abutments are spalled at exterior girders - 10/4/2019										
1130/3:Cracking (RC and Other)	ft	20	0	0	95	19	5	1	0	0
Notes:North abutment has map cracking, south has a wide crack down the middle - 10/4/2019										
4000/3:Settlement	ft	15	0	0	100	15	0	0	0	0
Notes:South abutment appears to be tipping in-girders not touching at face. - 10/4/2019										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Alert Code 1: Minor deck deterioration. Abuts. are spalled at girders. Channel has heavy vegetation growth with scour to east. - 10/4/2019

Alert Code 2: Scour under structure, 4-5' deep near south abut. Abutments have moderate to heavy concrete deterioration, north has map cracking. South abut tipping in, girders not touching at face. Measured on SE with 2' level: 10/13 - 3/4"; 10/15 3/4", 10/19 3/4". - 10/4/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	79.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	WHEATLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 3 NORTH WHEATLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	627524.5 5200514.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 28 50 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 16 30 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	30 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed	1977	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	2019	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	27 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	1 48 05/16/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	212 Structure Load Rated	06/22/2016
52 Deck Width	24.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-21.0

Structure Number: 09-118-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	721	0	0	83	600	17	121	0	0
1140/1:Decay/Section Loss	sq.ft	361	0	0	83	300	17	61	0	0
Notes:Deck is worn heavily - 10/4/2019										
1180/1:Abrasion	sq.ft	360	0	0	83	300	17	60	0	0
Notes:Deck is worn heavily - 10/4/2019										
107/1:Steel Opn Girder/Beam	ft	361	0	0	83	301	17	60	0	0
1000/1:Corrosion	ft	301	0	0	100	301	0	0	0	0
Notes:Paint peeled to base metal; rust evident 60%. - 10/4/2019										
2210/1:Movement	ft	60	0	0	0	0	100	60	0	0
Notes:Outer girders are tipped - 10/4/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	40	400	60	599	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	40	400	60	599	0	0
205/3:Re Conc Column	each	10	0	0	100	10	0	0	0	0
1080/3:Delamination/Spall/Patched Area	each	3	0	0	100	3	0	0	0	0
Notes:Pile 2 & 3 south, and Pile 2 north are showing minor deterioration. - 10/4/2019										
1090/3:Exposed Rebar	each	1	0	0	100	1	0	0	0	0
Notes:Pile 4 south has exposed rebar - 10/4/2019										
1130/3:Cracking (RC and Other)	each	6	0	0	100	6	0	0	0	0
Notes:Piling have hairline cracks - 10/4/2019										
215/3:Re Conc Abutment	ft	52	0	0	62	32	39	20	0	0
1130/3:Cracking (RC and Other)	ft	52	0	0	62	32	39	20	0	0
Notes:Wide diagonal cracks between outer 2 piles in SE, SW, and NW corners. Horizontal cracking thru the remainder - 10/4/2019										
234/1:Re Conc Pier Cap	ft	52	87	45	12	6	2	1	0	0
1130/1:Cracking (RC and Other)	ft	7	0	0	86	6	14	1	0	0
Notes:Wide crack beneath Pile 1 south. Hairline cracking thru the remainder. - 10/4/2019										
235/1:Timber Pier Cap	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
Notes:Timber caps are worn - 10/4/2019										
313/1:Fixed Bearing	each	24	0	0	100	24	0	0	0	0
1000/1:Corrosion	each	24	0	0	100	24	0	0	0	0
Notes:Bearings have corrosion - 10/4/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Paint system is not effective - 10/4/2019										
332/1:Timb Bridge Railing	ft	59	0	0	32	19	68	40	0	0
1020/1:Connection	ft	40	0	0	0	0	100	40	0	0
Notes:Rail is disconnected due to impact damage. Posts 1 & 4 east are missing. - 10/4/2019										
1160/1:Crack (Timber)	ft	19	0	0	100	19	0	0	0	0
Notes:Rail is cracked due to impact damage - 10/4/2019										

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Structure Number: 09-118-21.0

8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
Notes:2'-3' scour under structure - 10/4/2019										
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:2'-2' scour under structure - 10/4/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Minor cracking in wings - 10/4/2019										

Remarks: Vert curves both directions. Old pile in channel. Cattle panel across channel on east side. Traffic damage on railing , rail post # 1 & # 4 east are missing. - 10/4/2019

Alert Code 1: Paint peeled to base metal; rust evident 60%. 2-3' deep scour under structure. South piles 2&3 and north pile 2 showing minor deterioration, south pile 4 has exposed rebar. both caps have hair lines cracked. Erosion at wingwalls. - 10/4/2019

Alert Code 2: Outside girders are tipped. - 10/4/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	GILL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 SO. 1 EAST OF WHEATLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	627786.7 5188091.7	Condition	
98 Border Bridge	Unknown (P)	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 28 51 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 18 33 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2011 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	17 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	33 Ft.	Other Special	N
49 Structure Length	33.00 Ft.	218 Channel Profile	1 48 05/16/2019
50 Curb/Sidewalk Widths	0.5 Ft Rt-Side	Chaining Date	None
	0.5 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/25/2012
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	811	100	811	0	0	0	0	0	0
111/1:Timber Open Girder	ft	575	100	575	0	0	0	0	0	0
1160/1:Crack (Timber)	ft	33	100	33	0	0	0	0	0	0
202/1:Steel Column	each	18	0	0	100	18	0	0	0	0
1000/1:Corrosion	each	18	0	0	100	18	0	0	0	0
Notes:Minor corrosion on steel pile - 10/9/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Steel protective coating has limited effectiveness - 10/9/2019										
216/1:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
231/1:Steel Pier Cap	ft	48	100	48	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	68	100	68	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Yellow PVC end markers at all corners, SE end marker has been broken off. Erosion behind wingwalls. - 10/9/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-34.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	WALBURG TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	FIELD DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 1 SOUTH OF CHAFFEE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 45' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	627913.4 5179358.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2012 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.6 Ft.	Underwater	N
48 Length of Max Span	5 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	12/19/2012
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevold, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE 63" X 87" X 48' CMPAS		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	144	100	144	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8402/1:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: 10/2012 - PVC Flexible marker on all but Southeast corner, Replaced with TRIPLE 63" x 87" CMPAs. South pipe has up to 2' of sediment. - 10/4/2019

Alert Code 1: . - 10/4/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-118-36.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	82.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	WALBURG TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 3 SOUTH OF CHAFFEE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	627961.7 5176589.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 36 66 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 22 40 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1964 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	2 Intolerable - Replace
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.9 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	88.91 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	212 Structure Load Rated	06/22/2016
52 Deck Width	25.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevoid, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-118-36.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	2,314	0	0	100	2,314	0	0	0	0
1180/1:Abrasion	sq.ft	2,314	0	0	100	2,314	0	0	0	0
Notes:Minor abrasion throughout the decks driving surface - 10/4/2019										
107/1:Steel Opn Girder/Beam	ft	535	0	0	100	535	0	0	0	0
1000/1:Corrosion	ft	535	0	0	100	535	0	0	0	0
Notes:Minor corrosion on girders - 10/4/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has failed - 10/4/2019										
206/3:Timber Column	each	24	0	0	71	17	29	7	0	0
1150/3:Check/Shake	each	17	0	0	100	17	0	0	0	0
Notes:Pile has shrinkage cracking. - 10/4/2019										
1170/3:Split/Delamination (Timber)	each	7	0	0	0	0	100	7	0	0
Notes:Pier # 2 piling # 3, 4, 5 and Pier # 3 pile # 1, 2, 5, 6 are splitting. - 10/4/2019										
216/2:Timber Abutment	ft	56	0	0	100	56	0	0	0	0
1020/2:Connection	ft	28	0	0	100	28	0	0	0	0
Notes:2" gap between planks in south backwall. - 10/4/2019										
1160/2:Crack (Timber)	ft	28	0	0	100	28	0	0	0	0
Notes:weathering cracks in timber abutments - 10/4/2019										
235/1:Timber Pier Cap	ft	105	24	25	76	80	0	0	0	0
1160/1:Crack (Timber)	ft	80	0	0	100	80	0	0	0	0
Notes:Weathering cracks in timber pier caps - 10/4/2019										
332/1:Timb Bridge Railing	ft	177	0	0	97	172	0	0	3	5
1160/1:Crack (Timber)	ft	172	0	0	100	172	0	0	0	0
Notes:Minor cracking throughout timber bridge railing - 10/4/2019										
7000/1:Damage	ft	5	0	0	0	0	0	0	100	5
Notes:NE rail has 5 ft of section loss & curb damage. - 10/4/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: 2" conduit attached to w curb.Single 6"x 12" Yellow end markers at approach corners. Pile has shrinkage cracking. 2" of gravel overburden on deck. All timber element have minor to moderate weather cracking. NE rail has 5 ft of section loss & curb damage. - 10/4/2019

Alert Code 1: Deck planks are showing wear and are separated up to 2". 2" gap between planks in south backwall. Paint peeled to base metal - rust evident - 100% of surface area. Moderate girder rust. - 10/4/2019

Alert Code 2: Pier # 2 piling # 3, 4, 5 and Pier # 3 pile # 1, 2, 5, 6 are splitting. - 10/4/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-119-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	AMENIA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 1 NORTH OF AMENIA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 01' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 18' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	628932.9 5209088.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel continuous	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	6 Corrugated Steel	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 36 65 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 21 39 Tons
208 Dk Overburden	24 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	3 Intolerable - Correct
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.5 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 05/16/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/22/2016
	27.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-119-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
30/1:Steel Deck - Orthotropic	sq.ft	1,690	99	1,675	1	15	0	0	0	0
1000/1:Corrosion	sq.ft	15	0	0	100	15	0	0	0	0
Notes:Minor corrosion in 15' section of deck - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	999	99	984	2	15	0	0	0	0
7000/1:Damage	sq.ft	15	0	0	0	0	0	0	100	15
Notes:15' section of deck has coating scraped off - 10/7/2019										
107/1:Steel Opn Girder/Beam	ft	659	0	0	100	659	0	0	0	0
1000/1:Corrosion	ft	659	0	0	100	659	0	0	0	0
Notes:Minor corrosion of girders - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3430/1:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Weathering steel has varying colors - 10/7/2019										
202/3:Steel Column	each	15	0	0	100	15	0	0	0	0
1000/3:Corrosion	each	15	0	0	100	15	0	0	0	0
Notes:Minor corrosion of columns - 10/7/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3430/3:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Weathering steel has varying colors - 10/7/2019										
231/1:Steel Pier Cap	ft	85	0	0	100	85	0	0	0	0
1000/1:Corrosion	ft	85	0	0	100	85	0	0	0	0
Notes:Minor corrosion of pier caps - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3430/1:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Weathering steel has varying colors - 10/7/2019										
330/1:Metal Bridge Railing	ft	121	100	121	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
6000/2:Scour	each	1	0	0	100	1	0	0	0	0
Notes:2'-3' deep scour behind SW wing - 10/7/2019										

Remarks: Double b&w end markers on approach corners. Sharp vert. & horiz. Curve - north. Minor channel aggradation - east. - 10/7/2019

Alert Code 1: Weathering steel in girders, caps & piling has varying colors. Moderate erosion behind SW wingwall may soon affect rdwy. SW cap may be rotating. - 10/7/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-119-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	GILL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST OF CASSELTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	0 0	105 Federal Lands Highways	Not applicable
16 Latitude	46d 52' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 18' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	629300.9 5192335.9	Condition	
98 Border Bridge	Unknown (P)	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2014 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	January 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	0
47 Total Horizontal Clearance	28.0 Ft.	Underwater	0
48 Length of Max Span	10 Ft.	Other Special	0
49 Structure Length	32.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	04/09/2015
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 11 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	0.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
TRIPLE 10'X 4' X 58' RCB		116 Minimum Navigation Vertical Clearance	0 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-119-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	174	100	174	0	0	0	0	0	0
Notes: _										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes: _										

Remarks: B&A end markers at all 4 corners. Moderate vegetation on both of the east and west channels.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-119-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	GILL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 WEST 2 NORTH OF DURBIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 18' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	629385.4 5187896.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	December 17, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	40.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	12/05/2018
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
TRIPLE 12 X 9 X 44' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-119-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
243/1:Other Culvert	ft	132	100	132	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/2018 - Bridge replaced with a RCB - 12/17/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-119-33.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	WALBURG TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	FIELD DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 SOUTH OF CHAFFEE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 45' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 18' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	629515.7 5179865.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1966 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	October 27, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	15.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X4X64' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-119-33.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	128	91	117	9	11	0	0	0	0
1130/3:Cracking (RC and Other)	ft	11	0	0	100	11	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No signing. Moderate channel vegetation and silt accumulations at both ends. Both barrels have 10" silt accumulation. Minor erosion at SE corner of structure.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-119-35.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	45.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	WALBURG TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 2 SOUTH CHAFFEE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 44' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 18' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	629550.4 5177948.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	3 Steel	Load Rating and Posting	
		31 Design Load	Unknown
45 No. Spans in Main Unit	1		P Posted for load
46 No. Approach Spans	2	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 14 26 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 6 12 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	2 20.0-29.9%below
Age and Service		209 Posted in "Tons"	12 Tons
27 Yr Built	1945 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	October 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	Y 24 10/04/2019
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	49 Ft.	Other Special	N
49 Structure Length	108.92 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	23.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-119-35.1

Structure Number: 09-119-35.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	2,573	0	0	100	2,573	0	0	0	0
1180/1:Abrasion	sq.ft	2,573	0	0	100	2,573	0	0	0	0
Notes:Minor abrasion throughout deck - 10/4/2019										
113/1:Steel Stringer	ft	594	0	0	100	594	0	0	0	0
1000/1:Corrosion	ft	594	0	0	100	594	0	0	0	0
Notes:Minor corrosion on steel stringers - 10/4/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has completely failed - 10/4/2019										
120/1:Steel Truss	ft	98	0	0	100	98	0	0	0	0
1000/1:Corrosion	ft	98	0	0	100	98	0	0	0	0
Notes:Minor corrosion on steel truss - 10/4/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has completely failed - 10/4/2019										
152/1:Steel Floor Beam	ft	72	0	0	100	72	0	0	0	0
1000/1:Corrosion	ft	72	0	0	100	72	0	0	0	0
Notes:Steel floor beams have minor corrosion - 10/4/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has completely failed - 10/4/2019										
162/1:Stl Gus Plate	each	12	0	0	100	12	0	0	0	0
1000/1:Corrosion	each	12	0	0	100	12	0	0	0	0
Notes:Minor corrosion on steel gusset plates - 10/4/2019										
206/3:Timber Column	each	30	0	0	40	12	60	18	0	0
1170/3:Split/Delamination (Timber)	each	30	0	0	40	12	60	18	0	0
Notes:Pile No. 5, Abutment 1 is split, all pile are cracked and split to varying degrees. - 10/4/2019										
216/2:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	105	0	0	100	105	0	0	0	0
1160/1:Crack (Timber)	ft	105	0	0	100	105	0	0	0	0
Notes:Minor cracking in timber pier caps - 10/4/2019										
313/2:Fixed Bearing	each	12	0	0	100	12	0	0	0	0
1000/2:Corrosion	each	12	0	0	100	12	0	0	0	0
Notes:Minor corrosion on fixed bearings - 10/4/2019										
515/2:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/2:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has failed - 10/4/2019										
332/1:Timb Bridge Railing	ft	217	0	0	100	217	0	0	0	0
1160/1:Crack (Timber)	ft	217	0	0	100	217	0	0	0	0

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-119-35.1

Notes:Weathering cracks throughout timber bridge rail - 10/4/2019											
7357/1:Pack Rust	each	1	0	0	100	1	0	0	0	0	0
Notes:Pack rust on the top of steel truss - 10/4/2019											
8401/2:Wings	each	4	100	4	0	0	0	0	0	0	0

Remarks: NBI Remarks: 4 x 8 flex end markers sw, nw. Minor vertical & horizontal curve to north, Moderate horizontal curve to south. PVC conduit on west curb. Posted 5 ton per axle, 12 ton gross. Pier 2 & 3 caps are split. Fracture critical inspection done 10/17. Inspection was done with a hammer, extendable mirror and a ladder to get within arms reach. - 10/4/2019

Alert Code 1: Entire structure has varying degrees of rust. Knee braces no. 2 & 3 Lt. & no. 3 Rt. are bent. u3L3, u2L2 Lt. & u2L2 rt, and south end of left upper chord have minor collision damage. Bottom of south backwall is exposed. Pile No. 5, Abutment 1 is split. NW, SW, and SE anchor bolts at ends of the truss are gone. - 10/4/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-120-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	AMENIA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 1 NORTH AMENIA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 00' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 16' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	630561.1 5208346.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 29 53 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1967 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	35 Ft.	Other Special	N
49 Structure Length	37.07 Ft.	218 Channel Profile	1 48 05/16/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/22/2018
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-120-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
16/1:Re Conc Top Flange	sq.ft	947	99	935	1	12	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	12	0	0	100	12	0	0	0	0
Notes:Deck sections have chipped out on south end, 6" X 2' spall in the middle of the deck, 1" deep - 10/7/2019										
110/1:Re Conc Opn Girder/Beam	ft	295	98	290	2	5	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Honeycombing on bottom of Girders 3 & 4 - 10/7/2019										
1090/1:Exposed Rebar	ft	3	0	0	100	3	0	0	0	0
Notes:Spalls with corroded rebar visible on bottoms of Girders 2, 5, & 7. - 10/7/2019										
202/3:Steel Column	each	14	0	0	100	14	0	0	0	0
1000/3:Corrosion	each	13	0	0	100	13	0	0	0	0
Notes:Steel piling have moderate rust - 10/7/2019										
1900/3:Distortion	each	1	0	0	100	1	0	0	0	0
Notes:Flange of west pile in south abutment is bent - 10/7/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Paint non existent - 10/7/2019										
216/3:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
1150/3:Check/Shake	ft	26	0	0	100	26	0	0	0	0
Notes:Minor wear of timber planks - 10/7/2019										
4000/3:Settlement	ft	26	0	0	100	26	0	0	0	0
Notes:Planks of north abutment appear to have settled at the west end - 10/7/2019										
231/1:Steel Pier Cap	ft	52	0	0	100	52	0	0	0	0
1000/1:Corrosion	ft	52	0	0	100	52	0	0	0	0
Notes:Caps have moderate corrosion - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Paint non-existent - 10/7/2019										
330/1:Metal Bridge Railing	ft	75	0	0	100	75	0	0	0	0
1000/1:Corrosion	ft	75	0	0	100	75	0	0	0	0
Notes:Rail has corrosion - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Paint is non-existent - 10/7/2019										
331/1:Re Conc Bridge Railing	ft	75	99	74	1	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Small spall in west curb - 10/7/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Vertical curves both directions. - 10/7/2019

Alert Code 1: Steel piling & caps have moderate rust. Center of deck holds water, joints 2-6 are leaking. North abutment planks have appeared to settle west. Deck sections have chipped out areas on south end. Corroded rebar on beams 2,5&7, honeycombed 3&4. Flange of west pile in south abutment is bent. - 10/7/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-120-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	88.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	CASSELTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 4 WEST CASSELTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 17' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	629762.7 5199240.0	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Slab		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 24 43 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 26 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	33 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1986 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	50 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	7 Countermeasures
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 11 In.	90 Date of Last Inspection	October 07, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.1 Ft.	Other Special	N
48 Length of Max Span	31 Ft.	218 Channel Profile	1 48 05/16/2017
49 Structure Length	72.00 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.4 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.4 Ft Lt-Side	212 Structure Load Rated	06/01/1999
51 Bridge Rdwy Width - Curb to Curb	28.1 Ft.	213 Federal Aid Project Number	CP 84-CA-OIE
52 Deck Width	30.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 11 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 09-120-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	2,160	100	2,160	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	2,160	100	2,160	0	0	0	0	0	0
156/1:Timber Floor Beam	ft	60	0	0	100	60	0	0	0	0
1170/1:Split/Delamination (Timber)	ft	40	0	0	100	40	0	0	0	0
Notes:Minor splitting of all timber - 10/7/2019										
7000/1:Damage	ft	20	0	0	100	20	0	0	0	0
Notes:Floor beam in east span is warped. - 10/7/2019										
206/1:Timber Column	each	20	0	0	100	20	0	0	0	0
Notes:All piling have minor splits. - 10/7/2019										
1170/1:Split/Delamination (Timber)	each	20	0	0	100	20	0	0	0	0
Notes:All piling have minor splits - 10/7/2019										
216/1:Timber Abutment	ft	60	67	40	33	20	0	0	0	0
1150/1:Check/Shake	ft	20	0	0	100	20	0	0	0	0
Notes:Minor weathering of the abutment timber - 10/7/2019										
235/1:Timber Pier Cap	ft	80	0	0	100	80	0	0	0	0
1150/1:Check/Shake	ft	80	0	0	100	80	0	0	0	0
Notes:Minor weathering of pier caps. - 10/7/2019										
332/1:Timb Bridge Railing	ft	144	0	0	100	144	0	0	0	0
1150/1:Check/Shake	ft	144	0	0	100	144	0	0	0	0
Notes:Minor weathering of timber - 10/7/2019										
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
7000/1:Damage	each	1	0	0	100	1	0	0	0	0
Notes:NE wing pile has been cut through. - 10/7/2019										

Remarks: B&A end markers attached to rail on all corners. Ice nose added to both piers. - 10/7/2019

Alert Code 1: Channel has moderate veg. with minor scour under structure. Deck has AC overlay with separation over piers-6" W, 7" E. Cross bracing is cracked, additional added on west pier. Center deck straps broken. East floor beam is warped and split. West cap brace between 2 north pile broken & reinforced. All piling have minor splits. - 10/7/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-120-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	CASSELTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 2 NORTH CASSELTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 17' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	630605.2 5198505.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	4 Protection Undermined
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 32 58 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 35 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1969 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 25, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	29 Ft.	218 Channel Profile	1 48 05/16/2017
49 Structure Length	32.15 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch, Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-120-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
16/1:Re Conc Top Flange	sq.ft	822	100	822	0	0	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	256	84	214	15	39	1	3	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
Notes:Spalls with exposed rebar in Girders 6 & 7. - 10/25/2019										
1090/1:Exposed Rebar	ft	1	0	0	0	0	100	1	0	0
Notes:Spalls with exposed rebar in Girders 6 & 7. - 10/25/2019										
1130/1:Cracking (RC and Other)	ft	39	0	0	100	39	0	0	0	0
Notes:Minor girder cracks with efflorescence - 10/25/2019										
206/3:Timber Column	each	14	0	0	100	14	0	0	0	0
1150/3:Check/Shake	each	14	0	0	100	14	0	0	0	0
Notes:Minor shallow splitting of timber - 10/25/2019										
216/3:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
1150/3:Check/Shake	ft	52	0	0	100	52	0	0	0	0
Notes:Minor shallow splitting of timber - 10/25/2019										
235/2:Timber Pier Cap	ft	52	0	0	100	52	0	0	0	0
1150/2:Check/Shake	ft	52	0	0	100	52	0	0	0	0
Notes:Minor shallow splitting of timber - 10/25/2019										
330/1:Metal Bridge Railing	ft	66	0	0	100	66	0	0	0	0
1000/1:Corrosion	ft	66	0	0	100	66	0	0	0	0
Notes:Minor rail corrosion. - 10/25/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Paint is non-existent. - 10/25/2019										
331/1:Re Conc Bridge Railing	ft	66	100	66	0	0	0	0	0	0
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
Notes:SE wing top plank broken. Wing piles deteriorated. - 10/25/2019										
7000/3:Damage	each	1	0	0	100	1	0	0	0	0
Notes:SE wing top plank broken. - 10/25/2019										

Remarks: 6x12" yellow markers at NE & SW corners. Change Line 91 to 12 month inspection frequency. - 10/25/2019

Alert Code 1: Heavy embankment erosion - SW & NE quad. Minor to moderate channel erosion. Minor riprap displacement. Beaver dam to west. SE wing top plank broken. Wing piles deteriorated. Minor girder cracks with efflorescence. Drain holes plugged. 10/15 Caps are crushing, 10/19 crushing is minor. - 10/25/2019

Alert Code 2: 10/15 Spalls with exposed steel in girders 6 & 7. - 10/25/2019

Alert Code 3: Major embankment erosion in the SW corner-appears to be scouring around the end of a beaver dam across the channel power pole 5' from edge of bank, emailed Tom, Frank, & Blaine-Cass Co on 10/7/2019. - 10/25/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-120-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	62.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	EVEREST TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 4 SOUTH CASSELTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 17' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	630810.3 5187920.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 9 16 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 7 14 Tons
208 Dk Overburden	1 None	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	14 Tons
27 Yr Built	1953 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	3 Intolerable - Correct
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	15 Ft.	90 Date of Last Inspection	November 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	37 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	1 48 05/16/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/05/2016
	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-120-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	958	100	958	0	0	0	0	0	0
111/1:Timber Open Girder	ft	600	60	360	33	200	7	40	0	0
1140/1:Decay/Section Loss	ft	10	0	0	0	0	100	10	0	0
Notes:Girder 3 has sections of decay - 11/6/2019										
1150/1:Check/Shake	ft	200	0	0	100	200	0	0	0	0
Notes:Shallow splitting of timber girders. - 11/6/2019										
1170/1:Split/Delamination (Timber)	ft	30	0	0	0	0	100	30	0	0
Notes:Girder 1 is split below, which is exposing timber curb connections, and Girder 8 is split midspan - 11/6/2019										
202/1:Steel Column	each	10	0	0	100	10	0	0	0	0
1000/1:Corrosion	each	10	0	0	100	10	0	0	0	0
Notes:Piling have minor corrosion - 11/6/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Non-existent - 11/6/2019										
216/1:Timber Abutment	ft	48	100	48	0	0	0	0	0	0
231/1:Steel Pier Cap	ft	48	0	0	100	48	0	0	0	0
1000/1:Corrosion	ft	48	0	0	100	48	0	0	0	0
Notes:Minor corrosion of steel. - 11/6/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Non-existent - 11/6/2019										
332/1:Timb Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Double B & A markers at approach corners. Posted for 6 tons per axle, 14 tons gross. East fascia girder (#15) has timber plank attached midspan. - 11/6/2019

Alert Code 1: Varying degrees of deterioration on bottom of girders. Girder 1 is split below timber curb connections. Girder #3 is decayed and Girder 8 is split at midspan. - 11/6/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-120-32.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	MAPLE RIVER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00944 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RIBUTARY TO MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST OF CHAFFEE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	19.296	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 46' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 17' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	629981.1 5181488.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 42 76 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 46 Tons
208 Dk Overburden	32 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	310 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	36 Ft.	90 Date of Last Inspection	October 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	32.5 Ft.	Underwater	N
48 Length of Max Span	50 Ft.	Other Special	N
49 Structure Length	56.10 Ft.	218 Channel Profile	1 48 05/18/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/23/2018
	32.5 Ft.	213 Federal Aid Project Number	CBRS-944(51)
52 Deck Width	36.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-120-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,103	100	2,103	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	2,103	100	2,103	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	335	100	335	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	72	86	62	14	10	0	0	0	0
1130/2:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:Cracks counted in concrete abutments - 10/24/2019										
331/1:Re Conc Bridge Railing	ft	112	63	70	38	42	0	0	0	0
1130/1:Cracking (RC and Other)	ft	42	0	0	100	42	0	0	0	0
Notes:Cracks counted in concrete bridge rail - 10/24/2019										
7362/1:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Single B&A end markers on all 4 corners. Channel has heavy vegetation growth. Minor, random spalling at beam seats and in back wall. Collision damage to guardrail at NW, NE, & SE corners. 3" dia spall in north exterior girders, minor scour under structure. - 10/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-120-32.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	83.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	MAPLE RIVER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 NORTH LYNCHBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 46' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 17' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	630962.1 5182246.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 30 54 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 18 33 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1963 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 17, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.9 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 05/16/2019
49 Structure Length	41.01 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	06/23/2016
51 Bridge Rdwy Width - Curb to Curb	24.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-120-32.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,066	100	1,066	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	203	0	0	100	203	0	0	0	0
1000/1:Corrosion	ft	203	0	0	100	203	0	0	0	0
Notes:Minor corrosion on girders - 12/17/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has failed - 12/17/2019										
206/3:Timber Column	each	12	0	0	92	11	8	1	0	0
1160/3:Crack (Timber)	each	11	0	0	100	11	0	0	0	0
Notes:Piles have minor weathering cracks - 12/17/2019										
1170/3:Split/Delamination (Timber)	each	1	0	0	0	0	100	1	0	0
Notes:North pile 6 split - 12/17/2019										
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
1150/3:Check/Shake	ft	52	100	52	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
1150/1:Check/Shake	ft	52	100	52	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	82	76	62	0	0	0	0	24	20
7000/2:Damage	ft	20	0	0	0	0	0	0	100	20
Notes:Sections of bridge rail missing - 12/17/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No end markers. Old piling in channel. Moderate channel erosion - east. Heavy channel vegetation - west. Laminated deck planks are pulled 1"-2" apart at south end of deck, which is allowing dirt and gravel to accumulate on south abutment cap. Scour under structure has exposed bottom plank of both backwalls. Paint peeled to base metal - rust evident 95% of surface area. Pile 6 in north abutment is split. South backwall beginning to lean south. - 12/17/2019

Alert Code 1: Sections of rail at NW and SE corners of the bridge are gone. Moderate embankment erosion behind SW & SE wingwalls. - 12/17/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-120-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	MAPLE RIVER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 2 SOUTH LYNCHBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 44' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 17' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	631034.4 5178298.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2013 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	15 Ft.	90 Date of Last Inspection	October 28, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	10/25/2013
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch, Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 10' x 14' x 100' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-120-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
243/1:Other Culvert	ft	104	100	104	0	0	0	0	0	0
Notes:Incomplete Element Inspection 10/9/19 - 10/28/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:Incomplete Element Inspection 10/9/19 - 10/28/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Incomplete Element Inspection 10/9/19 - 10/28/2019										

Remarks: 10/25/2013 - New box in 2013. CAN THE FREQUENCY BE CHANGED TO 48 MONTHS - BOX CULVERT??? - 10/28/2019

Alert Code 1: Debris hung up on the west side of the structure. - 10/28/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-121-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	72.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HUNTER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTHWEST OF HUNTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 11' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 15' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	631739.7 5227920.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	40 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	24 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 08, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.3 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/15/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	07/26/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-121-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	635	95	603	5	32	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	32	0	0	100	32	0	0	0	0
Notes:Several random hairline cracks throughout the deck. - 10/8/2019										
107/1:Steel Opn Girder/Beam	ft	125	0	0	100	125	0	0	0	0
1000/1:Corrosion	ft	125	0	0	100	125	0	0	0	0
Notes:Minor corrosion/pitting of girder steel. - 10/8/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Paint on girders is entirely gone - 10/8/2019										
205/3:Re Conc Column	each	8	100	8	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	52	48	25	25	13	27	14	0	0
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
Notes:Bottom 1/2 of abutment broken off at NW corner, top 1/2 and cap cracked severely. - 10/8/2019										
1130/3:Cracking (RC and Other)	ft	15	0	0	87	13	13	2	0	0
Notes:Minor diagonal cracks at NE and SE corners, & horizontal crack at west end of south abutment. Wide diagonal crack in NW corner. - 10/8/2019										
6000/3:Scour	ft	10	0	0	0	0	100	10	0	0
Notes:Bottom of south abutment exposed in the center and east end. Previous inspection noted a hole in the roadway east - not observed 10/2019. - 10/8/2019										
234/1:Re Conc Pier Cap	ft	52	69	36	27	14	4	2	0	0
1080/1:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
Notes:Shallow spalling at random locations on caps - 10/8/2019										
1130/1:Cracking (RC and Other)	ft	6	0	0	67	4	33	2	0	0
Notes:Cracking at both ends of south cap. Severe cracking at west end of north cap. - 10/8/2019										
331/2:Re Conc Bridge Railing	ft	49	96	47	4	2	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Several shallow spalls in the rails - 10/8/2019										
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Scour in side ditches has caused the riprap to shift - 10/8/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: No signing or railing. Vertical curves both directions. Broken concrete & pipe in sw ditch. Channel has heavy vegetation growth. - 10/8/2019

Alert Code 1: Girders have corrosion. Moderate erosion behind wingwalls. Varying degrees of deck deterioration. West wings cracked. Diagonal cracks at NW, NE & SE corners of abutments. - 10/8/2019

Alert Code 2: NW corner of abutment broken off bottom half, top half & cap severely cracked. Bottom of south abut exposed on east & center, hole in roadway on east - did not observe the hole 10/19. - 10/8/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-121-17.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	AMENIA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00922 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST OF AMENIA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	20.996	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 00' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 15' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	632212.7 5207247.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	4 Load Testing
108 Wearing Surface	4 Low Slump Concrete	64 Oper. Rating	HS 43 79 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 20 38 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2014 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	65 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	129.00 Ft.	218 Channel Profile	1 48 05/21/2019
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/09/2014
	28.0 Ft.	213 Federal Aid Project Number	CB1301
52 Deck Width	30.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-121-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	3,870	99	3,843	1	27	0	0	0	0
1120/3:Efflorescence/Rust Staining	sq.ft	27	0	0	100	27	0	0	0	0
Notes:Minor soffit efflorescence - 10/7/2019										
520/3:Conc Re Prot Sys	sq.ft	3,870	100	3,870	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	516	100	516	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	60	100	60	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	61	100	61	0	0	0	0	0	0
310/1:Elastomeric Bearing	each	16	100	16	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	258	90	232	10	26	0	0	0	0
1130/3:Cracking (RC and Other)	ft	26	0	0	100	26	0	0	0	0
Notes:Rail posts are cracked with efflorescence visible - 10/7/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Alert Code 1: Minor soffit efflorescence. Concrete bridge rail blocks have cracks with efflorescence. - 10/7/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-121-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	EVEREST TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 1 SOUTH CASSELTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 52' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 15' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	632326.1 5192507.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 29 53 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1986 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	60 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 09, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	30.2 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	1 48 05/18/2017
49 Structure Length	37.07 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/23/2018
51 Bridge Rdwy Width - Curb to Curb	30.5 Ft.	213 Federal Aid Project Number	C.P. 85-EV-OIE SITE 2
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-121-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	371	81	301	19	70	0	0	0	0
1090/1:Exposed Rebar	ft	35	0	0	100	35	0	0	0	0
Notes:Spalls with rebar exposed on the bottom of channel beams - 10/9/2019										
1130/1:Cracking (RC and Other)	ft	35	0	0	100	35	0	0	0	0
Notes:Random hairline cracking throughout T-beams - 10/9/2019										
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	75	100	75	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	75	0	0	100	75	0	0	0	0
1160/1:Crack (Timber)	ft	75	0	0	100	75	0	0	0	0
Notes:Minor weather cracking throughout bridge rail - 10/9/2019										
6000/2:Scour	each	1	100	1	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor riprap displacement. 6" x 12" yellow reflectors attached to rail all corners. Moderate channel erosion to Northeast. Random hairline cracks in channel beams. Minor 3" dia. spalls with exposed rebar on bottom of channel Beams 3, 5, 6, 9. - 10/9/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-121-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	EVEREST TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 5 SOUTH CASSELTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 15' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	632448.3 5186879.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 27 49 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	203 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1950 106 Yr Reconstructed	1979	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	6 Equal Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	20 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	-1.00	71 Waterway Adequacy	7 Above Minimum
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	5 Above Tolerable
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	18 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	January 10, 2018
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	25.6 Ft.	Fracture Critical	N
48 Length of Max Span	23 Ft.	Underwater	N
49 Structure Length	49.87 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	218 Channel Profile	1 48 05/16/2019
	0.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	25.6 Ft.	207 Transporter Erector Routes and Sites	-1
52 Deck Width	26.2 Ft.	212 Structure Load Rated	01/23/2018
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Kelsch
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-121-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	1,313	0	0	100	1,313	0	0	0	0
156/1:Timber Floor Beam	ft	52	50	26	50	26	0	0	0	0
1150/1:Check/Shake	ft	26	0	0	100	26	0	0	0	0
202/3:Steel Column	each	6	0	0	0	0	100	6	0	0
1000/3:Corrosion	each	6	0	0	0	0	100	6	0	0
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/3:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
215/3:Re Conc Abutment	ft	52	0	0	98	51	2	1	0	0
1130/3:Cracking (RC and Other)	ft	8	0	0	88	7	13	1	0	0
1190/3:Abrasion(PSC/RC)	ft	44	0	0	100	44	0	0	0	0
231/1:Steel Pier Cap	ft	26	0	0	100	26	0	0	0	0
1000/1:Corrosion	ft	26	0	0	100	26	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
235/1:Timber Pier Cap	ft	79	67	53	33	26	0	0	0	0
1150/1:Check/Shake	ft	26	0	0	100	26	0	0	0	0
332/1:Timb Bridge Railing	ft	98	50	49	0	0	50	49	0	0
7363/3:Steel Section Loss	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Old piling in channel. Slight vertical curve - south. Yellow reflectors attached to end of rail at all corners. Cable strung across east rail. 11/2015: New timber caps & east rail. Deck has 3" of gravel on it.

Alert Code 1: Pier piling rust with minor section loss. Abutment concrete has moderate scaling and cracking. West rail has shifted south due to broken posts.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-121-32.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	83.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	MAPLE RIVER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TRIBUTARY MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH OF LYNCHBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 47' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 15' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	632557.3 5182691.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Slab		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	18+Mod (HS 20+Mod) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	6 Bituminous	64 Oper. Rating	HS 25 45 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 17 32 Tons
208 Dk Overburden	32 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	31 Ft.	Other Special	N
49 Structure Length	87.93 Ft.	218 Channel Profile	1 48 05/18/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.5 Ft.	213 Federal Aid Project Number	BRO-9(1) SITE 1
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevold, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-121-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	2,669	100	2,669	0	0	0	0	0	0
156/1:Timber Floor Beam	ft	59	100	59	0	0	0	0	0	0
1150/1:Check/Shake	ft	59	100	59	0	0	0	0	0	0
206/3:Timber Column	each	20	100	20	0	0	0	0	0	0
1150/3:Check/Shake	each	20	100	20	0	0	0	0	0	0
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
1150/2:Check/Shake	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	121	95	115	5	6	0	0	0	0
1160/2:Crack (Timber)	ft	6	0	0	100	6	0	0	0	0
Notes:West pier cap # 3 has 6 ft crack. - 10/9/2019										
332/1:Timb Bridge Railing	ft	117	100	117	0	0	0	0	0	0
1150/1:Check/Shake	ft	117	100	117	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 6" x 12" yellow reflectors attached to rail - all 4 corners. Slight vertical curves both directions. Wet areas on underside of deck. West pier cap # 3 has 6 ft crack. Asphalt overlay has deteriorated. - 10/9/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-121-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	73.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	MAPLE RIVER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH OF LYNCHBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 44' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 15' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	632701.9 5177174.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 26 48 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1997 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 N 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	October 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	18 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	50 Ft.	Other Special	N
49 Structure Length	155.84 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/25/1997
	27.9 Ft.	213 Federal Aid Project Number	DPI-0036(003)091
52 Deck Width	29.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevold, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-121-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,607	100	4,607	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	623	98	613	2	10	0	0	0	0
1110/1:Cracking (PSC)	ft	10	0	0	100	10	0	0	0	0
Notes:Cracking with efflorescence on the top of box beams - 10/24/2019										
210/3:Re Conc Pier Wall	ft	59	100	59	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	59	0	0	49	29	0	0	51	30
1130/2:Cracking (RC and Other)	ft	1	0	0	100	1	0	0	0	0
Notes:Cracking with efflorescence on south abutment - 10/24/2019										
4000/2:Settlement	ft	58	0	0	48	28	0	0	52	30
Notes:Both abutments are leaning, see comments below - 10/24/2019										
234/2:Re Conc Pier Cap	ft	59	100	59	0	0	0	0	0	0
8398/3:Slope Protection	each	3	0	0	100	3	0	0	0	0
4000/3:Settlement	each	3	0	0	100	3	0	0	0	0
Notes:Slope protection has settled into channel - 10/24/2019										
8401/2:Wings	each	4	50	2	0	0	50	2	0	0
4000/2:Settlement	each	2	0	0	0	0	100	2	0	0
Notes:South wing are tipping and have spalls with rebar exposed - 10/24/2019										

Remarks: Most riprap is buried at the north end. Cracking with efflorescence in south abutment. They have Houston Eng. monitoring the stability of the abutments. 10/2018 Pier 3 is leaning North, E 1/2"/2' and W 1 1/4"/2'. Pier 2 is plumb 10/2018 - 10/24/2019

Alert Code 1: Minor random cracking at ends of deck with soffit efflorescence. 11/2015: Abutment 4 is leaning north 1"/2'-measurements taken below both exterior girders-no change 10/2017. 10/2018: 1"/2' NW and 1 1/8"/2' NE 10/19: NE 1" in 2', NW 1-1/4" in 2'. Top of SW and SE wingwalls have spalled and have exposed rebar due to movement of the south abutment. Center diaphragm at Pier 2 has turned and has spalled. - 10/24/2019

Alert Code 3: 11/2015: Abutment 1 is leaning south 3"/2'-measurements taken below both exterior girders, 10/2017: 3 3/4"/2' SW and 3 1/2"/2' SE. 10/2018: 4 1/4"/2' SW and 4 1/4"/2' SE. 10/19: SE 4-7/8" in 2', SW 4-1/2" in 2' - 10/24/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-122-04.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	76.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HUNTER TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF HUNTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 11' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 14' 23.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	633349.2 5227741.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	5 Moderate Damage
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1955 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	3 Intolerable - Correct
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	December 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	15.7 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	33.14 Ft.	218 Channel Profile	1 48 05/21/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14X26' MULTIPLATE WITH CONCRET		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-122-04.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
205/3:Re Conc Column	each	8	0	0	100	8	0	0	0	0
1190/3:Abrasion(PSC/RC)	each	8	0	0	100	8	0	0	0	0
Notes:Element is underwater, unable to verify defect - 12/18/2019										
215/2:Re Conc Abutment	ft	56	0	0	89	50	11	6	0	0
1080/2:Delamination/Spall/Patched Area	ft	6	0	0	0	0	100	6	0	0
Notes:Element is underwater, unable to verify defect - 12/18/2019										
1190/2:Abrasion(PSC/RC)	ft	50	0	0	100	50	0	0	0	0
Notes:Element is underwater, unable to verify defect - 12/18/2019										
231/2:Steel Pier Cap	ft	26	0	0	100	26	0	0	0	0
1000/2:Corrosion	ft	26	0	0	100	26	0	0	0	0
Notes:Element is underwater, unable to verify defect - 12/18/2019										
515/2:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
234/2:Re Conc Pier Cap	ft	56	0	0	100	56	0	0	0	0
240/2:Steel Culvert	ft	52	0	0	100	52	0	0	0	0
1000/2:Corrosion	ft	52	0	0	100	52	0	0	0	0
Notes:Minor deformity & loss protective coating at water line. - 12/18/2019										
515/2:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
1130/2:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:Minor cracks in wing walls. - 12/18/2019										
8402/2:Headwalls	each	2	0	0	100	2	0	0	0	0
1130/2:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
Notes:Hairline cracking in headwalls - 12/18/2019										

Remarks: Sharp vertical curves both directions. Concrete chunks placed as riprap at 4 corners. 10/2019: 3' clearance to top of culvert, will not be able to inspect substructure elements without a diver. NW embankment is sliding. - 12/18/2019

Alert Code 1: SE & SW corners of wings & steel are cracked & breaking out 10/15. - 12/18/2019

Alert Code 2: Moderate cracking in concrete @ seam joints and moderate rust on steel @ water line . Moderate erosion behind wingwalls, pile showing on all wingwalls. - 12/18/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-122-16.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	79.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	AMENIA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00922 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF AMENIA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	22.695	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 00' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 14' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	633299.7 5207380.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 33 61 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1955 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	65 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	18.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	21.7 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	61.02 Ft.	218 Channel Profile	1 48 05/16/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	21.7 Ft.	212 Structure Load Rated	06/24/2016
52 Deck Width	23.3 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-122-16.0

Structure Number: 09-122-16.0

Element / Env. / Description		Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,421	73	1,043	26	375	0	3	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	23	0	0	87	20	13	3	0	0
Notes:Several soffit spalls mainly at deck drains and south overhang. 3' X 3" deep spall at west end of deck. - 10/7/2019										
1090/1:Exposed Rebar	sq.ft	20	0	0	100	20	0	0	0	0
Notes:Bars exposed in soffit in south overhang - 10/7/2019										
1130/1:Cracking (RC and Other)	sq.ft	51	0	0	100	51	0	0	0	0
Notes:Deck cracks which have been previously routed - 10/7/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	284	0	0	100	284	0	0	0	0
Notes:Sections of the deck are worn - 10/7/2019										
107/1:Steel Opn Girder/Beam	ft	489	0	0	100	489	0	0	0	0
1000/1:Corrosion	ft	489	0	0	100	489	0	0	0	0
Notes:Varying degrees of girder rust - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Paint is non-existent - 10/7/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Paint is not effective anymore - 10/7/2019										
152/1:Steel Floor Beam	ft	20	0	0	100	20	0	0	0	0
1000/1:Corrosion	ft	20	0	0	100	20	0	0	0	0
Notes:Minor corrosion on floor beam - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Paint is no longer effective - 10/7/2019										
205/3:Re Conc Column	each	2	0	0	100	2	0	0	0	0
1130/3:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:Both columns have cracks - 10/7/2019										
1190/3:Abrasion(PSC/RC)	each	1	0	0	100	1	0	0	0	0
Notes:Substructure deterioration at waterline - 10/7/2019										
215/3:Re Conc Abutment	ft	56	0	0	96	54	4	2	0	0
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
Notes:Spall beneath Girder 4 at east abutment - 10/7/2019										
1130/3:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes:Minor abutment cracking - 10/7/2019										
1190/3:Abrasion(PSC/RC)	ft	45	0	0	100	45	0	0	0	0
Notes:Substructure concrete deterioration at waterline - 10/7/2019										
234/1:Re Conc Pier Cap	ft	30	77	23	23	7	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Small spall beneath Girder 2 in west face of pier cap - 10/7/2019										
1130/1:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
Notes:Minor cracks in cap - 10/7/2019										

Structure Number: 09-122-16.0

330/1:Metal Bridge Railing	ft	121	75	91	25	30	0	0	0	0
1000/1:Corrosion	ft	30	0	0	100	30	0	0	0	0
Notes:Sections of rail have minor corrosion - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	60	600	30	300	10	99
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	60	600	30	300	10	99
Notes:Varying degrees of paint effectiveness - 10/7/2019										
331/2:Re Conc Bridge Railing	ft	121	96	116	4	5	0	0	0	0
1090/2:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:Spall with exposed rebar at east end of south curb - 10/7/2019										
1130/2:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:Minor cracks - 10/7/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Double B&A end markers on approach corners. Signed for narrow bridge both directions. Minor channel debris., Beaver dam on North of structure. - 10/7/2019

Alert Code 1: Varying degrees of deck cracking & deck underside / soffit deterioration-many exposed rusty rebar & spalls. Varying degrees girder rust. Minor substructure cracking & concrete deterioration at waterline. E abut spalled at girder 4 bearing, and pier cap W side spalled under Girder #2. Girders 2,6&8 are misaligned at pier. Curb rail SE corner spalled with corroded rebar. Channel has minor scour. - 10/7/2019

Alert Code 2: West abutment appears to be settling. Measurements taken with 2' level on top of curb at pier: 2013: NW-1/4" NE-1/16" SW-3/8" SE-1/16"; 2015: NW-1/4" NE-1/8" SW-7/16" SE-0"; 2018 NE 1/4" others 1/4" @ 23F, 10/2019:all within 1/4" in 2'. - 10/7/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-122-16.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	AMENIA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF AMENIA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 00' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 14' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	633788.8 5207586.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	34 Tons
27 Yr Built	1945 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.3 Ft.	Underwater	N
48 Length of Max Span	27 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	1 48 05/16/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/23/2018
	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	23.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-122-16.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
16/1:Re Conc Top Flange	sq.ft	700	100	700	0	0	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	210	95	200	5	10	0	0	0	0
1130/1:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:Minor cracks - 10/7/2019										
202/3:Steel Column	each	10	0	0	100	10	0	0	0	0
1000/3:Corrosion	each	10	0	0	100	10	0	0	0	0
Notes:Minor corrosion on piling - 10/7/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Non-existent - 10/7/2019										
216/3:Timber Abutment	ft	49	29	14	71	35	0	0	0	0
1170/3:Split/Delamination (Timber)	ft	10	0	0	100	10	0	0	0	0
Notes:Minor splitting of timber - 10/7/2019										
6000/3:Scour	ft	25	0	0	100	25	0	0	0	0
Notes:Bottom plank of south abutment is exposed - 10/7/2019										
235/2:Timber Pier Cap	ft	49	0	0	100	49	0	0	0	0
1150/2:Check/Shake	ft	49	0	0	100	49	0	0	0	0
Notes:Minor weathering of timber - 10/7/2019										
330/1:Metal Bridge Railing	ft	57	0	0	100	57	0	0	0	0
1000/1:Corrosion	ft	57	0	0	100	57	0	0	0	0
Notes:Minor corrosion of rail - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Non-existent - 10/7/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Double B&A end markers on approach corners. Signed for 34 tons. - 10/7/2019

Alert Code 1: Embankment erosion southeast and southwest of structure has been ripped. Bottom plank of south abutment exposed. - 10/7/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-122-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	CASSELTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 1 NORTH CASSELTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 15' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	632607.4 5197701.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 29 53 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1969 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	34 Ft.	Other Special	N
49 Structure Length	37.07 Ft.	218 Channel Profile	1 48 05/16/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/23/2018
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-122-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
16/1:Re Conc Top Flange	sq.ft	1,258	100	1,258	0	0	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	295	98	288	2	7	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
Notes:Minor girder spalls on bottom flange throughout. 4" X 8 " spall on soffit between Girders 6 & 7. - 10/7/2019										
1090/1:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
Notes:Honeycombed area w/ exposed rebar on bottom of Girder 3 - 10/7/2019										
206/2:Timber Column	each	14	100	14	0	0	0	0	0	0
216/2:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
1150/2:Check/Shake	ft	52	0	0	100	52	0	0	0	0
Notes:Minor weathering of abutment timber - 10/7/2019										
235/2:Timber Pier Cap	ft	52	0	0	100	52	0	0	0	0
1170/2:Split/Delamination (Timber)	ft	2	0	0	100	2	0	0	0	0
Notes:South end of west abutment cap is split. - 10/7/2019										
1180/2:Abrasion	ft	50	0	0	100	50	0	0	0	0
Notes:Minor weathering of cap timber - 10/7/2019										
330/1:Metal Bridge Railing	ft	75	0	0	100	75	0	0	0	0
1000/1:Corrosion	ft	75	0	0	100	75	0	0	0	0
Notes:Rail has minor corrosion - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Paint is non-existent - 10/7/2019										
331/1:Re Conc Bridge Railing	ft	75	100	75	0	0	0	0	0	0
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Riprap is washing out. - 10/7/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 6"x12" PVC markers on 4 corners. Garbage & old appliances have been dumped under the structure. Girder drain holes are plugged. Erosion of north & south ditches west of the structure. - 10/7/2019

Alert Code 1: Riprap is washing out. Channel has moderate vegetation and erosion. Start of scour under structure. Girder 3 has a small area of unconsolidated concrete with exposed steel. Minor girder spalls throughout. South end of west abutment cap is split. Girder tie missing on west between 6 & 7 with 8"x4" spall on the soffit. Minor weathering of timber elements. - 10/7/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-122-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	CASSELTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF CASSELTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 14' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	633862.0 5196279.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	23.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/06/2017
	0.0 Ft.	213 Federal Aid Project Number	15848
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
DOUBLE 117" X 79" X 90' CSPA			

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-122-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	180	100	180	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: 01/06/2017 - Bridge replaced with a 117" x 79" x 90' CSPA , slope protection rip rap added & channel cleaned in 2016 NO DEFECTS FOUND . - 10/16/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-122-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	MAPLE RIVER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 1 NORTH LYNCHBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 47' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 14' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	634146.8 5183275.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 11, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	09/11/2018
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 11' X 12' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-122-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	108	100	108	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 6/25/2018 - Bridge replaced with a double 11' x 12' RCB in 2018.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-123-23.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	CASSELTON TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00930 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST CASSELTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	22.095	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 13' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	634659.4 5196144.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2015 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	525 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	January 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	47.00 Ft.	218 Channel Profile	0 0 08/19/2013
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	10/26/2015
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD 11' X 9' X 66' RCBC		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-123-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
245/3:Pre Concrete Culvert	ft	264	98	258	2	6	0	0	0	0
Notes: _										
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
1110/3:Cracking (PSC)	ft	262	99	258	2	4	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes: _										

Remarks: 10/2015 - NEW QUAD PRECAST BOX CULVERT 11'x9'x66' B&A end markers all corners. CSP side pipe with flap gates on NE & SE, CSP in SW. Longitudinal hair line cracked at the roof/ chamfer , roof has spall also (Box # 4 section # 2).

Alert Code 1: Minor separation & misalignment installed.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-123-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	EVEREST TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 SOUTH CASSELTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 52' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 13' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	635496.5 5192009.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1950 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	January 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X7X48' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-123-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	95	78	74	21	20	1	1	0	0
1130/2:Cracking (RC and Other)	ft	21	0	0	95	20	5	1	0	0
6000/2:Scour	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	0	0	75	3	25	1	0	0
1130/2:Cracking (RC and Other)	each	4	0	0	75	3	25	1	0	0

Remarks: Minor scour at box ends. Flood debris hung up at west end of south box. Vertical crack on wingwalls.

Alert Code 1: 10/07: SW exterior wall cracked up to 1" wide at wingwall . Vertical crack and efflorescence showing at SW corner of the box.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-124-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HUNTER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELM RIVER TRIB.	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST OF HUNTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 11' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	636584.4 5227339.7	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1970 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	25.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	17 Ft.	90 Date of Last Inspection	January 22, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	0 11/03/2015
47 Total Horizontal Clearance	25.0 Ft.	Underwater	0 01/01/1901
48 Length of Max Span	10 Ft.	Other Special	0 01/01/1901
49 Structure Length	22.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	04/14/2015
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 11 In.	214 Delayed Inspection	
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 10' X 5' X 40' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-124-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	80	49	39	51	41	0	0	0	0
Notes: _										
1010/1:Cracking	ft	34	0	0	100	34	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	7	0	0	100	7	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8402/1:Headwalls	each	1	100	1	0	0	0	0	0	0

Remarks: 4/14/2015 - Older double 10 x 5 RCB found and put on inventory.

Alert Code 1: 1/2018 - Alert Code 1: Erosion on top of box at west end. Heavy channel vegetation. Minor misalignment and separation of culvert sections. Minor silt accumulation in north barrel, and 2'-3' accumulation in south barrel.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-124-23.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	CASSELTON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	00930 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	FIELD DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	CITY OF CASSELTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	23.595	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 12' 07.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	636945.7 5196199.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2001 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	675 30 Year of ADT 2017	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	6.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 10, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	37.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	38.1 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	40.0 Ft.	213 Federal Aid Project Number	CB9901
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen, Kirkevold
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10X4X40' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-124-23.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	120	98	117	3	3	0	0	0	0
Notes: _										
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
8398/3:Slope Protection	each	4	0	0	100	4	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B&a end markers on all 4 corners. Riprap is covered. Minor settling evidence asphalt patching on roadway 2014 . box # 1 segment # 2 have honeycomb, minor spalled at end sections.

Alert Code 1: Minor misalignment & joint separation .

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-124-37.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	82.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	LEONARD TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CO DRAIN 15	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 3 NORTH LEONARD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 42' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 13' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	636058.1 5173571.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 9 (H 10) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 24 43 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 17 31 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1955 106 Yr Reconstructed	1977	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	5 Above Min Tolerable
28 Lanes on Structure	2	68 Deck Geometry	5 Above Tolerable
29 ADT	20 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	-1.00	71 Waterway Adequacy	7 Above Minimum
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	7 Above Min Criteria
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	5 Stable w/in footing
32 Approach Roadway Width	14 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	October 22, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	23.6 Ft.	Fracture Critical	N
48 Length of Max Span	26 Ft.	Underwater	N
49 Structure Length	27.89 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	218 Channel Profile	1 48 05/17/2017
	0.7 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb		207 Transporter Erector Routes and Sites	-1
	23.6 Ft.	212 Structure Load Rated	01/23/2018
52 Deck Width	24.6 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch, Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-124-37.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	689	0	0	100	689	0	0	0	0
1180/1:Abrasion	sq.ft	689	0	0	100	689	0	0	0	0
Notes:Driving surface has minor wear - 10/22/2019										
156/1:Timber Floor Beam	ft	26	0	0	100	26	0	0	0	0
1150/1:Check/Shake	ft	26	0	0	100	26	0	0	0	0
Notes:Shallow split thru the entire length - 10/22/2019										
206/3:Timber Column	each	12	0	0	75	9	25	3	0	0
1140/3:Decay/Section Loss	each	1	0	0	0	0	100	1	0	0
Notes:Pile 6 west is hollow - 10/22/2019										
1150/3:Check/Shake	each	9	0	0	100	9	0	0	0	0
Notes:All pile have shallow splits - 10/22/2019										
1170/3:Split/Delamination (Timber)	each	2	0	0	0	0	100	2	0	0
Notes:Pile 3 east and Pile 2 west are split - 10/22/2019										
216/3:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1180/3:Abrasion	ft	49	0	0	100	49	0	0	0	0
Notes:Abutment timbers have minor wear - 10/22/2019										
235/1:Timber Pier Cap	ft	49	0	0	92	45	8	4	0	0
1150/1:Check/Shake	ft	4	0	0	100	4	0	0	0	0
Notes:North end of east cap has a partial split - 10/22/2019										
1170/1:Split/Delamination (Timber)	ft	4	0	0	0	0	100	4	0	0
Notes:South end of east cap is split all the way thru - 10/22/2019										
1180/1:Abrasion	ft	41	0	0	100	41	0	0	0	0
Notes:Surface has wear - 10/22/2019										
332/1:Timb Bridge Railing	ft	56	0	0	91	51	9	5	0	0
1020/1:Connection	ft	5	0	0	0	0	100	5	0	0
Notes:West end of south rail has separated from the deck - 10/22/2019										
1180/1:Abrasion	ft	51	0	0	100	51	0	0	0	0
Notes:Timbers are worn - 10/22/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Moderate channel vegetation. Deck showing wear. - 10/22/2019

Alert Code 1: Timber piling are cracked & have minor ice damage. West abutment pile 6 is hollow. West abutment pile 2 and East Abut pile 2,3,5,6 are split. There is some settlement at the east abutment. Timber rail is gone, only timber curb remains. PVC end markers at NW, NE, and SE corners and are bent over. - 10/22/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-125-16.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	RUSH RIVER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00922 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST OF AMENIA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	25.495	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 00' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	637918.2 5207465.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	4 Load Testing
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 32 58 Tons
Membrane	0 None	65 Inventory Rating Method	4 Load Testing
Dk Protect	None	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	0 Tons
27 Yr Built	1960 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.6 Ft.	Underwater	N
48 Length of Max Span	57 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 05/30/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	07/01/2012
	24.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-125-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,485	70	1,037	30	445	0	3	0	0
1090/1:Exposed Rebar	sq.ft	3	0	0	0	0	100	3	0	0
Notes:Soffit spall with exposed rebar at west end, south side - 10/16/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	445	0	0	100	445	0	0	0	0
Notes:Deck has some wear - 10/16/2019										
109/1:Pre Opn Conc Girder/Beam	ft	299	100	299	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	52	98	51	2	1	0	0	0	0
1130/2:Cracking (RC and Other)	ft	1	0	0	100	1	0	0	0	0
Notes:Hairline crack in west abutment - 10/16/2019										
313/1:Fixed Bearing	each	10	0	0	100	10	0	0	0	0
Notes:Minor corrosion of all bearings - 10/16/2019										
1000/1:Corrosion	each	10	0	0	100	10	0	0	0	0
Notes:Minor corrosion of all bearings - 10/16/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	50	499	50	500	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	999	0	0	50	499	50	500	0	0
Notes:Varying degrees of paint loss on the bearings - 10/16/2019										
330/1:Metal Bridge Railing	ft	121	50	60	50	61	0	0	0	0
1000/1:Corrosion	ft	60	0	0	100	60	0	0	0	0
Notes:Rails have minor corrosion - 10/16/2019										
1020/1:Connection	ft	1	0	0	100	1	0	0	0	0
Notes:North post # 4 is missing bolts - 10/16/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	50	500	40	400	10	99
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	999	0	0	50	500	40	400	10	99
Notes:Varying degrees of paint loss - 10/16/2019										
331/2:Re Conc Bridge Railing	ft	121	100	121	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Rust staining at west end of girder # 1 caused by exposed soffit rebar. Rock dam under structure. - 10/16/2019

Alert Code 1: Abutment footings exposed. Rebar exposed south soffit by railing attachment. North rail post # 4 has missing connection bolts. - 10/16/2019

Alert Code 2: Wood pile exposed at center footing on east abutment. Undermining at all backwalls. 10/19:unable to verify - 10/16/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-125-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	38.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	CASSELTON TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 SOUTH CASSELTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	638694.7 5194437.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	B Posting Recommended
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 13 24 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 9 17 Tons
208 Dk Overburden	1 None	70 Bridge Posting	1 30.0-39.9%below
Age and Service		209 Posted in "Tons"	14 Tons
27 Yr Built	1955 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	36 Ft.	Other Special	N
49 Structure Length	39.04 Ft.	218 Channel Profile	1 48 06/14/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/06/2018
	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 09-125-25.0

Structure Number: 09-125-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	936	0	0	95	885	5	51	0	0
1140/1:Decay/Section Loss	sq.ft	16	0	0	0	0	100	16	0	0
Notes:Several areas of decay on the deck - 10/16/2019										
1170/1:Split/Delamination (Timber)	sq.ft	160	0	0	78	125	22	35	0	0
Notes:Timber planks are split - 10/16/2019										
1180/1:Abrasion	sq.ft	760	0	0	100	760	0	0	0	0
Notes:Planks are worn - 10/16/2019										
111/2:Timber Open Girder	ft	623	0	0	94	588	6	35	0	0
1170/2:Split/Delamination (Timber)	ft	160	0	0	78	125	22	35	0	0
Notes:Girders 4, 5, 9,& 12 have moderate splits, various other minor splits throughout - 10/16/2019										
1180/2:Abrasion	ft	463	0	0	100	463	0	0	0	0
Notes:All girders are worn - 10/16/2019										
152/2:Steel Floor Beam	ft	46	0	0	98	45	2	1	0	0
1000/2:Corrosion	ft	45	0	0	100	45	0	0	0	0
Notes:Corrosion throughout - 10/16/2019										
1020/2:Connection	ft	1	0	0	0	0	100	1	0	0
Notes:West tie to north girder is detached - 10/16/2019										
515/2:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Non-existent - 10/16/2019										
205/3:Re Conc Column	each	10	0	0	100	10	0	0	0	0
1130/3:Cracking (RC and Other)	each	10	0	0	100	10	0	0	0	0
Notes:All columns have hairline cracks - 10/16/2019										
215/3:Re Conc Abutment	ft	49	0	0	39	19	12	6	49	24
1130/3:Cracking (RC and Other)	ft	7	0	0	14	1	86	6	0	0
Notes:Wide diagonal cracks at west end of south abutment and east end of north abutment - 10/16/2019										
4000/3:Settlement	ft	24	0	0	0	0	0	0	100	24
Notes:North abutment is undermined and is leaning north 2-1/2" in 2'. - 10/16/2019										
6000/3:Scour	ft	18	0	0	100	18	0	0	0	0
Notes:Undermining at the south abutment, timber planks added beneath the abutment - 10/16/2019										
234/2:Re Conc Pier Cap	ft	49	29	14	51	25	8	4	12	6
1080/2:Delamination/Spall/Patched Area	ft	16	0	0	63	10	0	0	38	6
Notes:East end of north cap is severely spalled, affecting the bearing. Several other minor spalls on the north cap. - 10/16/2019										
1090/2:Exposed Rebar	ft	2	0	0	0	0	100	2	0	0
Notes:Spalling with exposed rebar at the east end of the north cap. - 10/16/2019										
1130/2:Cracking (RC and Other)	ft	17	0	0	88	15	12	2	0	0
Notes:2 wide cracks in the south cap at the west end, other hairline cracks throughout. - 10/16/2019										
235/2:Timber Pier Cap	ft	49	0	0	100	49	0	0	0	0
1180/2:Abrasion	ft	49	0	0	100	49	0	0	0	0

Structure Number: 09-125-25.0

Notes: Timber is worn - 10/16/2019										
332/1:Timb Bridge Railing	ft	79	90	71	10	8	0	0	0	0
1140/1:Decay/Section Loss	ft	8	0	0	100	8	0	0	0	0
Notes: Impact damage at all 4 corners - 10/16/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	75	3	25	1	0	0
1130/3:Cracking (RC and Other)	each	3	0	0	100	3	0	0	0	0
Notes: SE, NW, and SW wings have wide cracks - 10/16/2019										
4000/3:Settlement	each	1	0	0	0	0	100	1	0	0
Notes: NE wing has pulled away from the abutment - 10/16/2019										

Remarks: REMARKS: 6"x12" / PVC markers at all corners. Horizontal curves both directions. Old pile & large rock in channel under bridge. North abutment cap is approx. 1' lower than south. first deck plank have moderate worn & small hole , timber railing have repaired , Floor beam steel protective coating have no longer effectiveness 10/2019: No Load Limit Signs - 10/16/2019

Alert Code 1: Concrete substructure has wide random cracks. SE, NW, & SW wingwalls are cracked. Girder 4 is cracked by weathering. West bank is sliding. NE wingwall has separated from the abut. Deck planks are worn. 24" deep void behind NE wingwall. Both abutments are undermined with timber planks behind the concrete. # 1 tied of Floor beam have lost connection. # 2 & # 9 timber diaphragms have missing & # 5 partly missing. all the timber elements are worn and have weather cracking. Beam # 5/9 & # 12 have moderate splits. Concrete columns have hairline cracks. - 10/16/2019

Alert Code 2: Large crack, spall & exposed corroded rebar at east end of north cap abutment, affecting the bearings. 11/2015: North abutment is leaning north 2-1/2" in 2' at Pile #'s 2 & 4-no change 10/19. - 10/16/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-125-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	EVEREST TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST OF DURBIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	638114.5 5184927.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 34 62 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1946 106 Yr Reconstructed	1979	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	5 Above Min Tolerable
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	20 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	-1.00	71 Waterway Adequacy	7 Above Minimum
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	6 Equal Min Criteria
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	18 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	December 18, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	25.9 Ft.	Fracture Critical	N
48 Length of Max Span	19 Ft.	Underwater	N
49 Structure Length	41.01 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	218 Channel Profile	1 48 06/14/2017
	0.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	25.9 Ft.	207 Transporter Erector Routes and Sites	-1
52 Deck Width	26.6 Ft.	212 Structure Load Rated	06/19/1990
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Nguyen, Finton
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 09-125-30.0

Structure Number: 09-125-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	1,087	0	0	100	1,087	0	0	0	0
Notes:Abrasion. - 12/18/2019										
1180/1:Abrasion	sq.ft	1,087	0	0	100	1,087	0	0	0	0
Notes:Minor abrasion on timber deck surface. - 12/18/2019										
156/1:Timber Floor Beam	ft	52	87	45	14	7	0	0	0	0
Notes:Floor beam #1 had 4 nut tied missing , floor beam #2 had 3 nut tied missing. - 12/18/2019										
1020/1:Connection	ft	7	0	0	100	7	0	0	0	0
Notes:Floor beam #1 (4), floor beam #2 (3). - 12/18/2019										
202/3:Steel Column	each	5	0	0	100	5	0	0	0	0
Notes:Incomplete Element Inspection 10-23-19 - 12/18/2019										
7363/3:Steel Section Loss	each	5	0	0	100	5	0	0	0	0
Notes:Functioning as its intended but steel protective coating has failed. - 12/18/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:No painted protective has fully effective. - 12/18/2019										
3440/3:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:No longer effectiveness. - 12/18/2019										
215/3:Re Conc Abutment	ft	52	90	47	10	5	0	0	0	0
Notes:Incomplete Element Inspection 10-23-19 - 12/18/2019										
1130/3:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
Notes:Incomplete Element Inspection 10-23-19 - 12/18/2019										
231/1:Steel Pier Cap	ft	26	0	0	100	26	0	0	0	0
Notes:Functioning good but steel protective has no longer effectiveness. - 12/18/2019										
1000/1:Corrosion	ft	26	0	0	100	26	0	0	0	0
Notes:Not fully protective. - 12/18/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Little to none of protection. - 12/18/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:No longer effectiveness. - 12/18/2019										
235/1:Timber Pier Cap	ft	82	95	78	5	4	0	0	0	0
Notes:Both end of bearing cap # 1 had hollow. - 12/18/2019										
1170/1:Split/Delamination (Timber)	ft	4	0	0	100	4	0	0	0	0
Notes:Bearing cap # 1 , both end. - 12/18/2019										
332/1:Timb Bridge Railing	ft	82	0	0	27	22	0	0	73	60
1020/1:Connection	ft	22	0	0	100	22	0	0	0	0
Notes:22 feet length of south rail remained in place. - 12/18/2019										
7000/1:Damage	ft	60	0	0	0	0	0	0	100	60
Notes:North rail missing , 22 LF remain on south rail. - 12/18/2019										
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Scour under structure is exposing east abutment piling and SW wingwall piling. Moderate erosion/scour at SW wingwall. - 12/18/2019										

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SEC 409

Structure Number: 09-125-30.0

8401/2:Wings	each	4	50	2	50	2	0	0	0	0
Notes:Erosion behind SW & SE wing walls. - 12/18/2019										

Remarks: Slight vertical curve to the east, safety cone is sitting by SW corner. - 12/18/2019

Alert Code 1: Heavy piling rust with minor section loss. Scour under structure is exposing east abutment piling and SW wingwall piling. Moderate wingwall erosion at all corners. Abutment 1 bottom bearing cap is decaying on south end approx. 4', north end of top bearing cap has a hollow sound 32" from the end. 3 Bolts & Nuts missing from East floor beam. 4 Bolts & Nuts missing from West floor beam. Moderate erosion/scour at SW wingwall. - 12/18/2019

Alert Code 2: North rail has detached and is setting on the deck. - 12/18/2019

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SEC 409

Structure Number: 09-125-30.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	EVEREST TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 NORTH OF DURBIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	638888.1 5186557.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 28 51 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 34 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1976 106 Yr Reconstructed	2013	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	December 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.6 Ft.	Underwater	N
48 Length of Max Span	46 Ft.	Other Special	N
49 Structure Length	47.90 Ft.	218 Channel Profile	1 48 06/14/2017
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	26.6 Ft.	212 Structure Load Rated	03/06/2018
52 Deck Width	28.5 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-125-30.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	335	100	335	0	0	0	0	0	0
202/3:Steel Column	each	14	0	0	100	14	0	0	0	0
7363/3:Steel Section Loss	each	14	0	0	100	14	0	0	0	0
Notes:Steel piling has corrosion and minor section loss at waterline. - 12/18/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/3:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has completely failed - 12/18/2019										
216/3:Timber Abutment	ft	56	0	0	100	56	0	0	0	0
1180/3:Abrasion	ft	56	0	0	100	56	0	0	0	0
Notes:Minor abrasion due to high water - 12/18/2019										
231/2:Steel Pier Cap	ft	56	0	0	100	56	0	0	0	0
1000/2:Corrosion	ft	56	0	0	100	56	0	0	0	0
Notes:Minor corrosion on pier caps - 12/18/2019										
515/2:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/2:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has completely failed - 12/18/2019										
235/2:Timber Pier Cap	ft	56	0	0	100	56	0	0	0	0
1160/2:Crack (Timber)	ft	56	0	0	100	56	0	0	0	0
Notes:Minor weathering cracks on timber pier caps - 12/18/2019										
330/1:Metal Bridge Railing	ft	95	100	95	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Steel protective coating has failed - 12/18/2019										
331/2:Re Conc Bridge Railing	ft	95	100	95	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
1140/3:Decay/Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Top plank of NW wingwall is damaged. - 12/18/2019										

Remarks: 10/28/2013: West T-beam section has been repaired. Channel vegetation. NW wingwall erosion. Scour under bridge. - 12/18/2019

Alert Code 1: Steel piling has corrosion and minor section loss at waterline. Top plank of NW wingwall is damaged. - 12/18/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-125-33.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	64.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	MAPLE RIVER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 3 SOUTH OF DURBIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 45' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	639032.5 5180131.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	22 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	16 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	32 Asphalt	209 Posted in "Tons"	12 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed	2012	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	3 Intolerable - Correct
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	October 22, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	89.90 Ft.	218 Channel Profile	1 48 06/04/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/24/2016
	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-125-33.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	2,077	100	2,077	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	2,077	0	0	100	2,077	0	0	0	0
3230/1:Effectiveness (Wearing Surface)	sq.ft	2,077	0	0	100	2,077	0	0	0	0
Notes:Asphalt wearing surface has cracking throughout and a spill on the East end - 10/22/2019										
107/2:Steel Opn Girder/Beam	ft	630	100	630	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	15	15	0	0	0	0	85	85
3440/2:Eff (Stl Protect Coat)	sq.ft	100	15	15	0	0	0	0	85	85
Notes:Steel protective coating has 85% loss of effectiveness - 10/22/2019										
152/2:Steel Floor Beam	ft	72	0	0	100	72	0	0	0	0
1000/2:Corrosion	ft	72	0	0	100	72	0	0	0	0
Notes:Minor corrosion on steel floor beams - 10/22/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Steel protective coating is substantially effective - 10/22/2019										
202/3:Steel Column	each	10	100	10	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	80	80	20	20	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	80	80	20	20	0	0	0	0
Notes:Steel protective coating is substantially effective - 10/22/2019										
206/3:Timber Column	each	12	0	0	100	12	0	0	0	0
1160/3:Crack (Timber)	each	12	0	0	100	12	0	0	0	0
Notes:Timber columns have weathering cracks - 10/22/2019										
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	60	100	60	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	48	0	0	100	48	0	0	0	0
1160/2:Crack (Timber)	ft	48	0	0	100	48	0	0	0	0
Notes:Timber pier caps have weathering cracks - 10/22/2019										
330/1:Metal Bridge Railing	ft	180	50	90	50	90	0	0	0	0
1000/1:Corrosion	ft	90	0	0	100	90	0	0	0	0
Notes:North guardrail has minor corrosion - 10/22/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	180	98	176	0	0	0	0	2	4
7000/2:Damage	ft	4	0	0	0	0	0	0	100	4
Notes:4 ft of timber curb missing on NW corner - 10/22/2019										
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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SEC 409

Structure Number: 09-125-33.2

Remarks: Double b&a end markers on approach corners. Structure is located at a "t" intersection. Posted for 15 mph & has "t" signs south and east. Sharp horizontal curve to the west. Old piling in channel. Sheet pile dam in SE drainage channel. Posted 5 ton per axle 12 ton gross NW only. Abutments have been replaced 12/12 with 5 steel h-pile each abut. West abut. pile 4 is missing a weld to the cap. Abut. caps are steel h-pile. New south metal & timber rail. All pile showing weather cracking. Rust evident 85%. Laminated deck planks are pulled apart 1"-2" between pier 3 & east abutment. - 10/22/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-126-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	BELL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELM RIVER TRIB. DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST OF HUNTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 11' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	639746.1 5227372.8	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1975 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	25.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	17 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	0 01/01/1901
47 Total Horizontal Clearance	25.0 Ft.	Underwater	0 01/01/1901
48 Length of Max Span	0 Ft.	Other Special	0 01/01/1901
49 Structure Length	26.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	02/24/2015
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 11 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
TRIPLE 5' X 7' X 48 CMPA		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 09-126-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	144	100	144	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	999	95	950	0	0	5	49	0	0
3420/3:Peel/Bub/Crack(Stl Protect Co	sq.ft	49	0	0	0	0	0	0	100	49
Notes:Pipes have a paint coating. Small sections have peeled off, no corrosion of the steel observed. - 10/8/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
Notes:East end of pipes have rock riprap - 10/8/2019										
8401/1:Wings	each	2	100	2	0	0	0	0	0	0
Notes:West end of pipes are encased in a concrete headwall with wings extending to the north and south. Minor cracking in the wings. - 10/8/2019										
8402/1:Headwalls	each	1	100	1	0	0	0	0	0	0
Notes:West end of pipes are encased in a concrete headwall. Minor cracking in this headwall. - 10/8/2019										

Remarks: 4/2016 - Minor scour hole at west end of structure. - 10/8/2019**Alert Code 1:** Minor cracking and settlement of west headwall & wings. - 10/8/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-126-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	RUSH RIVER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 1 SOUTH OF AMENIA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 59' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 09' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	639913.8 5205888.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 30 55 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 33 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1972 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	November 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	62.99 Ft.	218 Channel Profile	1 48 05/22/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/07/2017
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-126-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
16/1:Re Conc Top Flange	sq.ft	1,613	90	1,450	10	163	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	2	0	0	100	2	0	0	0	0
Notes:Spall in west side of top of Beam 4 towards east end of structure - 11/13/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	161	0	0	100	161	0	0	0	0
Notes:Driving surface has some minor wear. - 11/13/2019										
110/1:Re Conc Opn Girder/Beam	ft	505	97	488	0	0	3	17	0	0
1090/1:Exposed Rebar	ft	17	0	0	0	0	100	17	0	0
Notes:Spalling with exposed rebar on bottom of Channel Beam #'s 2-5 & 7 approx. 10' east of pier, and on bottom of Beam #'s 2 & 5 near the west abutment. - 11/13/2019										
206/3:Timber Column	each	19	0	0	90	17	11	2	0	0
1150/3:Check/Shake	each	17	0	0	100	17	0	0	0	0
Notes:All pile have shallow splits (shakes) - 11/13/2019										
1170/3:Split/Delamination (Timber)	each	2	0	0	0	0	100	2	0	0
Notes:Piles 5 & 6 in east abutment are split. - 11/13/2019										
216/3:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
1150/3:Check/Shake	ft	52	0	0	100	52	0	0	0	0
Notes:Timber planks have shallow splits (shakes) - 11/13/2019										
235/2:Timber Pier Cap	ft	75	0	0	97	73	3	2	0	0
1140/2:Decay/Section Loss	ft	23	0	0	100	23	0	0	0	0
Notes:Pier cap has minor decay and is showing evidence of crushing. - 11/13/2019										
1150/2:Check/Shake	ft	50	0	0	100	50	0	0	0	0
Notes:Caps have minor weather cracking (shakes) - 11/13/2019										
1170/2:Split/Delamination (Timber)	ft	2	0	0	0	0	100	2	0	0
Notes:North end of pier cap is split - 11/13/2019										
330/1:Metal Bridge Railing	ft	125	48	60	52	65	0	0	0	0
1000/1:Corrosion	ft	60	0	0	100	60	0	0	0	0
Notes:North rail has some corrosion from traffic scraping iut - 11/13/2019										
1900/1:Distortion	ft	5	0	0	100	5	0	0	0	0
Notes:Impact damage at north rail splice point mid bridge. - 11/13/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	30	300	60	600	10	99
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	999	0	0	30	300	60	600	10	99
Notes:Rail has varying degrees of paint loss - 11/13/2019										
331/2:Re Conc Bridge Railing	ft	125	100	125	0	0	0	0	0	0
8401/3:Wings	each	2	0	0	100	2	0	0	0	0
Notes:Moderate erosion behind east wingwalls. - 11/13/2019										

Remarks: No end markers. Old piling & fence, moderate debris in channel. - 11/13/2019

Alert Code 1: Moderate erosion behind all wingwalls. Spalling with exposed rebar on bottom of Channel Beam #'s 2-5 & 7 approx. 10' east of pier, and on bottom of Beam #'s 2 & 5 near the west abutment. Several beam ties broken near pier-not observed 11/19. Moderate erosion under east end of structure. Appears the beams may be misaligned at the pier-not observed 11/19. Pier cap is decayed with evidence of crushing & the north end is cracked. North rail has impact damage at splice. - 11/13/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-126-17.0

Alert Code 2: Pier Piles 5 & 6 have wide splits. - 11/13/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-126-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	68.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	RUSH RIVER TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 2 SOUTH OF AMENIA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 58' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 09' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	640301.1 5204811.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 30 55 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 33 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1939 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	15 Ft.	90 Date of Last Inspection	November 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 05/30/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/07/2017
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-126-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
16/1:Re Conc Top Flange	sq.ft	798	85	675	15	123	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	3	0	0	100	3	0	0	0	0
Notes:Spall in east side of Beam 3 at south end. - 11/13/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	120	0	0	100	120	0	0	0	0
Notes:Minor abrasion of the driving surface - 11/13/2019										
110/1:Re Conc Opn Girder/Beam	ft	249	100	248	0	1	0	0	0	0
7000/1:Damage	ft	1	0	0	100	1	0	0	0	0
Notes:Tie bolt missing between Beams 3 & 4 near the north end. - 11/13/2019										
215/3:Re Conc Abutment	ft	52	50	26	50	26	0	0	0	0
4000/3:Settlement	ft	26	0	0	100	26	0	0	0	0
Notes:South abutment is tipping in - 1-1/2" in 2' at east end. - 11/13/2019										
235/2:Timber Pier Cap	ft	52	50	26	50	26	0	0	0	0
1150/2:Check/Shake	ft	26	0	0	100	26	0	0	0	0
Notes:Minor weather cracking of timber. - 11/13/2019										
331/2:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
6000/3:Scour	each	2	0	0	100	2	0	0	0	0
Notes:3' deep scour behind NE and NW wings. - 11/13/2019										

Remarks: Horiz. curve north. 2" conduit attached to east curb. - 11/13/2019

Alert Code 1: Channel is aggrading east. Beam 3 is missing tie # 4 on north end. Top flange of Girder 3 has a 3' x 6" X 1" deep spall on the west side at the south end. South abutment tipping in 1 1/2" in 2' at SE corner. OCT 26 2017: 3/4". 11/2019: 1-1/2" in 2' (or 3/4" in 1'). 3' deep scour behind NE and NW wingwalls. - 11/13/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-126-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	RUSH RIVER TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 2.5 S OF AMENIA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 58' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 09' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	640140.7 5203712.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2015 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	15 Ft.	90 Date of Last Inspection	October 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.0 Ft.	Underwater	N
48 Length of Max Span	9 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/28/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 9 X 6 X 50' SSP		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-126-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	89	56	50	44	39	0	0	0	0
1000/3:Corrosion	ft	39	0	0	100	39	0	0	0	0
Notes:Minor corrosion at invert of north pipe - 10/16/2019										
515/3:Steel Protective Coating	sq.ft	100	90	90	0	0	10	10	0	0
3420/3:Peel/Bub/Crack(Stl Protect Co	sq.ft	100	90	90	0	0	10	10	0	0
Notes:Minor rust appearing at invert of north pipe - 10/16/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:Rock riprap at both ends of structure - 10/16/2019										

Remarks: Minor channel debris. South box is new. - 10/16/2019**Alert Code 1:** Minor rust at invert of north pipe. Channel erosion/drop-off west of structure. - 10/16/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-126-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	63.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HARMONY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH OF DUBBIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 09' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	640285.5 5194333.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 20 37 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 9 18 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 16, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 06/14/2017
49 Structure Length	41.01 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	06/27/2016
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 09-126-25.0

Structure Number: 09-126-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,033	31	323	69	710	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	10	0	0	100	10	0	0	0	0
Notes:Several minor cracks - 10/16/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	700	0	0	100	700	0	0	0	0
Notes:The entire deck is worn - 10/16/2019										
107/1:Steel Opn Girder/Beam	ft	246	0	0	100	246	0	0	0	0
1000/1:Corrosion	ft	246	0	0	100	246	0	0	0	0
Notes:All steel is corroded - 10/16/2019										
515/1:Steel Protective Coating	sq.ft	999	20	200	60	600	20	199	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	999	0	0	20	200	60	600	20	199
Notes:Varying degrees of paint loss - 10/16/2019										
202/3:Steel Column	each	5	0	0	100	5	0	0	0	0
1000/3:Corrosion	each	5	0	0	100	5	0	0	0	0
Notes:Pile have minor corrosion - 10/16/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Non-existent - 10/16/2019										
206/3:Timber Column	each	6	0	0	83	5	17	1	0	0
1170/3:Split/Delamination (Timber)	each	6	0	0	83	5	17	1	0	0
Notes:Large split in Pile 1, north. Remaining have minor splitting - 10/16/2019										
216/3:Timber Abutment	ft	26	0	0	100	26	0	0	0	0
6000/3:Scour	ft	26	0	0	100	26	0	0	0	0
Notes:Moderate scour under structure has eliminated embankment on south and there is undermining at the north abutment, 10/2019-unable to verify. - 10/16/2019										
231/1:Steel Pier Cap	ft	26	0	0	100	26	0	0	0	0
1000/1:Corrosion	ft	26	0	0	100	26	0	0	0	0
Notes:Caps have minor corrosion - 10/16/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Non-existent - 10/16/2019										
235/1:Timber Pier Cap	ft	26	0	0	0	0	100	26	0	0
1170/1:Split/Delamination (Timber)	ft	26	0	0	0	0	100	26	0	0
Notes:North timber cap is moderately split. - 10/16/2019										
330/1:Metal Bridge Railing	ft	82	0	0	100	82	0	0	0	0
1000/1:Corrosion	ft	70	0	0	100	70	0	0	0	0
Notes:Rails have minor corrosion. - 10/16/2019										
1900/1:Distortion	ft	12	0	0	100	12	0	0	0	0
Notes:Traffic impact to center of west rail - 10/16/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	50	500	50	499	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	999	0	0	50	500	50	499	0	0
Notes:Varying degrees of paint loss on the rails - 10/16/2019										
331/1:Re Conc Bridge Railing	ft	82	100	82	0	0	0	0	0	0

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SEC 409

Structure Number: 09-126-25.0

8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: End markers on all corners. West girder was bent with both backwalls broken in 2012, repaired that fall & reinforcing channels added to the west 3 girders. - 10/16/2019

Alert Code 1: Deck is worn due to abrasion. Moderate deck cracking. Timber backwalls tipping out. South abutment wall tabs are disconnecting from pile tabs. - 10/16/2019

Alert Code 2: North timber caps are split. Moderate scour under structure has eliminated embankment on south & undermining north. - 10/16/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-126-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	60.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	DURBIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 3 NORTH OF DURBIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 09' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	639926.0 5189806.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 15 28 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 9 17 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	2 20.0-29.9%below
Age and Service		209 Posted in "Tons"	16 Tons
27 Yr Built	1960 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	October 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.6 Ft.	Underwater	N
48 Length of Max Span	24 Ft.	Other Special	N
49 Structure Length	26.90 Ft.	218 Channel Profile	1 48 06/11/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	07/26/2017
	22.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-126-27.0

Structure Number: 09-126-27.0

[illegible]

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-126-27.0

8401/3:Wings	each	4	75	3	25	1	0	0	0	0
1140/3:Decay/Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:NW wing has decay - 10/3/2019										

Remarks: NBI Remarks: Moderate channel vegetation. New wingwall sw. new pile at ends of abut caps ne,nw,sw, and beside existing Pile 4 at Abutment 2. 4 x 6 reflective panel approach corners. Posted for 16 tons. - 10/3/2019

Alert Code 1: scour under structure. Paint peeled to base metal; rust evident 90%. minor bend in girder no. 7. minor railing damage. bottom planks are exposed in E abut. - 10/3/2019

Alert Code 2: Abutments have fire damage - varying degrees of section loss in caps, piling & backwalls. Abut. No. 1, piling no. 1 & piling 1, 2,3,4 & 5 abut 2 have heavy fire damage. 1, 2 & 3 have been cut off and a 12"x12" timber cap added. Pile 3 at Abut 2 has no bearing. - 10/3/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-126-27.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	73.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	DURBIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00933 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH OF DURBIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.199	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 09' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	640378.4 5190201.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	6 Bituminous	64 Oper. Rating	HS 30 54 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 14 25 Tons
208 Dk Overburden	35 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1960 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	155 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	32.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.3 Ft.	Underwater	N
48 Length of Max Span	33 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	1 48 06/14/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/26/2012
	25.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-126-27.1

Structure Number: 09-126-27.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	936	95	889	5	47	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	47	0	0	100	47	0	0	0	0
Notes:Random deck cracking - soffit efflorescence visible. - 10/3/2019										
510/1:Wearing Surfaces	sq.ft	87	95	83	5	4	0	0	0	0
3220/1:Crack (Wearing Surface)	sq.ft	4	0	0	100	4	0	0	0	0
Notes:Cracking evident in HBP wear course - 10/3/2019										
107/1:Steel Opn Girder/Beam	ft	253	0	0	100	253	0	0	0	0
1000/1:Corrosion	ft	253	0	0	100	253	0	0	0	0
Notes:Paint peeled to base metal-rust evident. 60%. - 10/3/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	50	500	50	499
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	50	500	50	499
Notes:Paint system 50% limited effectiveness and 50% non-existent - 10/3/2019										
206/3:Timber Column	each	14	0	0	57	8	29	4	14	2
1170/3:Split/Delamination (Timber)	each	13	0	0	54	7	31	4	15	2
Notes:Pile 5, Abut 1 & Pile 2, Abut 2 are split in half. Abut. 1, piling 3, & 6, & Abut 2, piling 1 & 5 are split moderately. Remaining pile have minor splits - 10/3/2019										
7000/3:Damage	each	1	0	0	100	1	0	0	0	0
Notes:Pile 7 at Abut 1 has fire damage - 10/3/2019										
216/3:Timber Abutment	ft	52	62	32	39	20	0	0	0	0
1180/3:Abrasion	ft	20	0	0	100	20	0	0	0	0
Notes:Abutment planks have wear - 10/3/2019										
235/2:Timber Pier Cap	ft	52	94	49	6	3	0	0	0	0
1140/2:Decay/Section Loss	ft	3	0	0	100	3	0	0	0	0
Notes:East end of cap - abut 1 is beginning to decay. - 10/3/2019										
330/1:Metal Bridge Railing	ft	66	50	33	50	33	0	0	0	0
1000/1:Corrosion	ft	25	0	0	100	25	0	0	0	0
Notes:Minor corrosion on rails. - 10/3/2019										
1900/1:Distortion	ft	8	0	0	100	8	0	0	0	0
Notes:Railings have minor collision damage. - 10/3/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Paint on rails is non-existent - 10/3/2019										
331/2:Re Conc Bridge Railing	ft	66	0	0	96	63	5	3	0	0
1130/2:Cracking (RC and Other)	ft	3	0	0	0	0	100	3	0	0
Notes:3 moderate cracks in the rail - 10/3/2019										
1190/2:Abrasion(PSC/RC)	ft	63	0	0	100	63	0	0	0	0
Notes:Rail has abrasion - 10/3/2019										
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
2210/3:Movement	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	0	0	75	3	25	1	0	0

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Structure Number: 09-126-27.1

1140/3:Decay/Section Loss	each	4	0	0	75	3	25	1	0	0
Notes:Section loss due to fire damage-SE, remaining 3 have various states of decay. - 10/3/2019										

Remarks: NBI Remarks: Double b&a end marker on approach corner. Asphalt deck overlay makes curbs non- existent. Varying degrees of wingwall decay. Heavy channel vegetation. Slope protection N end only. 11-26-2012 County milled off 2 1/2" asphalt in 2012. Re-rated by Bridge Division 10/15 -Fire damage to SE corner of bridge - 10/3/2019

Alert Code 1: Railings have minor collision damage. Random deck cracking - soffit efflorescence visible. East end of cap - abut 1 is beginning to decay. abut. 1, piling 3, 5, & 6, & abut 2, piling 1, 2, & 5 are split. Scour under structure. Paint peeled to base metal-rust evident. 60%. SE Wingwall and Abut 1 Pile 7 have fire damage. - 10/3/2019

Alert Code 2: Pile 5, Abut 1 and Pile 2, Abut 2 are split in half. - 10/3/2019

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SEC 409

Structure Number: 09-126-29.0

200 System Designation	2 – County On	Classification	
201 Status	Not Applicable	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	DURBIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00933 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH OF DURBIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.500	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 09' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	640459.1 5187153.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 25 45 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 41 75 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	155 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	9 Above Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	46 Ft.	90 Date of Last Inspection	December 31, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	24.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	46.0 Ft.	Underwater	N
48 Length of Max Span	16 Ft.	Other Special	N
49 Structure Length	34.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	Ft Rt-Side	Chaining Date	None
	Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	Ft.	213 Federal Aid Project Number	
52 Deck Width	0.0 Ft.	214 Delayed Inspection	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
DOUBLE 16 X 10 Precast RCB			

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SEC 409

Structure Number: 09-126-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	126	100	126	0	0	0	0	0	0
8398/1:Slope Protection	each	4	100	4	0	0	0	0	0	0
8401/1:Wings	each	8	100	8	0	0	0	0	0	0

Remarks: _

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-126-32.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	ADDISON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00944 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 3 SOUTH OF DURBIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	25.495	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 46' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	639936.8 5181736.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	7	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	6 Bituminous	64 Oper. Rating	HS 42 77 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 25 46 Tons
208 Dk Overburden	32 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1964 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	175 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	8.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 22, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	36 Ft.	Other Special	N
49 Structure Length	194.88 Ft.	218 Channel Profile	1 48 06/05/2018
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/27/2016
	25.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevold, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-126-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	5,070	100	5,070	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	5,070	0	0	100	5,070	0	0	0	0
3230/1:Effectiveness (Wearing Surface)	sq.ft	5,070	0	0	100	5,070	0	0	0	0
Notes:Asphalt overlay on deck has areas of deterioration and cracking - 10/22/2019										
107/1:Steel Opn Girder/Beam	ft	1,365	100	1,365	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	60	599	40	400	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	60	599	40	400	0	0	0	0
Notes:Steel protective coating is substantially effective - 10/22/2019										
202/2:Steel Column	each	7	100	7	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Steel protective coating is substantially effective - 10/22/2019										
206/3:Timber Column	each	40	0	0	100	40	0	0	0	0
1160/3:Crack (Timber)	each	40	0	0	100	40	0	0	0	0
Notes:All timber columns are cracked - 10/22/2019										
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	28	100	28	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	262	0	0	100	262	0	0	0	0
1160/2:Crack (Timber)	ft	262	0	0	100	262	0	0	0	0
Notes:Timber pier caps have minor cracking - 10/22/2019										
332/2:Timb Bridge Railing	ft	781	0	0	100	781	0	0	0	0
1180/2:Abrasion	ft	781	0	0	100	781	0	0	0	0
Notes:Minor abrasion on timber bridge rail - 10/22/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Single B&A end markers at all corners. Piers 4-6, Piles 1-5 are covered by timber cribbing. Sheet pile has been installed at NE corner of the structure, which is rusty and leaning in towards the channel. Debris hanging from the superstructure. Minor fire damage to Southwest corner. 10/15 - Pier 6 piles 1,2,3 split, South timber rail is tipping south - 10/22/2019

Alert Code 1: Girder 1, pier 3, span 3 has minor twist. Spans 2 & 3 south girder is tilted north at the top. Varying degrees of girder rust. Runoff from Northwest ditch has caused moderate erosion between piers 2 & 3. Abutment 1 cap has minor rotation. Abut 1, Pile 2, Pier 2, Pile 3, Pier 3, Piles 4, 6, 7, and Pier 7, Pile 2 are split. Abut 1, Pile 1 is hollow and has fire damage. - 10/22/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-126-32.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	ADDISON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00933 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH OF DURBIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.500	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 46' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 09' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	640581.1 5182686.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 26 48 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	8 Desirable Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	85 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	32 Ft.	90 Date of Last Inspection	October 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.8 Ft.	Underwater	N
48 Length of Max Span	69 Ft.	Other Special	N
49 Structure Length	180.12 Ft.	218 Channel Profile	1 48 06/14/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/11/1996
	32.2 Ft.	213 Federal Aid Project Number	CBRS-0933(51)
52 Deck Width	34.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-126-32.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	6,265	100	6,265	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	899	100	899	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	69	100	69	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	72	100	72	0	0	0	0	0	0
234/1:Re Conc Pier Cap	ft	69	100	69	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	361	89	321	11	40	0	0	0	0
1130/2:Cracking (RC and Other)	ft	40	0	0	100	40	0	0	0	0
Notes:Cracks counted in concrete bridge rail - 10/23/2019										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
2210/3:Movement	each	2	0	0	100	2	0	0	0	0
Notes:Bank slumping/ sliding into Pier 2. - 10/23/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Single B&A end markers on all four corners. Bank slumping/ sliding into Pier 2. Paint peeling off of steel pile at Pier 2. Hairline cracking in Girder 1, Span 3. - 10/23/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-127-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST OF HUNTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 10' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 08' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	641367.0 5226976.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Other	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2003 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	0.0 Ft.	Underwater	N
48 Length of Max Span	7 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch, Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 81"X59"X34' CSP		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-127-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/1:Steel Culvert	ft	102	100	102	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	95	950	5	49	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co	sq.ft	49	0	0	100	49	0	0	0	0
Notes:Sections of black painted coating has peeled off of the metal throughout all pipes. - 11/6/2019										
8398/2:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/2:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Approx. 2' scour at outlet (east) end of pipes. - 11/6/2019										

Remarks: Slope protections have been covered with CDF 11/15. PVC COATED CSP - 11/6/2019**Alert Code 1:** Coating peeling on west ends of pipes & chipping on east flares. 11/15 Misc areas in north culvert has areas on floor where coating is peeling. - 11/6/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-127-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	DURBIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	DURBIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 08' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	641410.8 5184991.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 42 75 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 21 38 Tons
Dk Protect	1 Epoxy Coated Reinforci	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	2017 106 Yr Reconstructed	67 Structural Condition	9 Above Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	50 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic		36 Traffic Safety Features	1 1 1 1
19 Bypass, Detour Length	2 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 30, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.0 Ft.	Other Special	N
48 Length of Max Span	49 Ft.	218 Channel Profile	1 48 01/01/2000
49 Structure Length	151.50 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	1.0 Ft Lt-Side	212 Structure Load Rated	02/16/2018
51 Bridge Rdwy Width - Curb to Curb	28.0 Ft.	213 Federal Aid Project Number	BRO-0009(048)
52 Deck Width	30.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevold, Finton, Czezok, Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	2 In-Place, Functioning
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-127-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	4,545	100	4,540	0	5	0	0	0	0
1130/3:Cracking (RC and Other)	sq.ft	5	0	0	100	5	0	0	0	0
Notes:Random cracking throughout deck - 10/30/2019										
104/1:Pre Clsd Box Girder	ft	610	100	610	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	60	100	60	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	72	100	72	0	0	0	0	0	0
311/1:Moveable Bearing	each	8	100	8	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
313/2:Fixed Bearing	each	8	100	8	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	303	100	303	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:Incomplete Element inspection 10-28-19. West slope protection under water - 10/30/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Bearing guide plates for Girder #'s 1 & 2 at the west abutment and Girder #4 at the east abutment have been shimmed and are not sitting flush on the abutments. Threaded rods connecting girders to guide plates are loose at both abutments. 2" gap between nut and bearing plate at the north swedge bolt of Girder #2 at the west abutment, several others are crooked. - 10/30/2019

Alert Code 1: Several 1" deep soffit spalls at vent holes that were drilled through the deck. - 10/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-128-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	70.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	BELL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 1 SOUTH OF HUNTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 10' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 06' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	642975.2 5226999.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 36 65 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 39 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1968 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	3 SC - Unstable
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	November 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/07/2017
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch, Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-128-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
16/1:Re Conc Top Flange	sq.ft	638	77	488	24	150	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	150	0	0	100	150	0	0	0	0
Notes:Numerous spalls on driving surface, some up to 42" long. - 11/6/2019										
110/1:Re Conc Opn Girder/Beam	ft	200	100	200	0	0	0	0	0	0
206/3:Timber Column	each	14	0	0	100	14	0	0	0	0
1140/3:Decay/Section Loss	each	3	0	0	100	3	0	0	0	0
Notes:E abut pile 1, 4, & 6 have impact damage. - 11/6/2019										
1150/3:Check/Shake	each	11	0	0	100	11	0	0	0	0
Notes:All piling have weather cracks (shallow splits or shakes). - 11/6/2019										
216/3:Timber Abutment	ft	52	0	0	50	26	50	26	0	0
1150/3:Check/Shake	ft	26	0	0	100	26	0	0	0	0
Notes:Timber has weather cracking (shallow splits or shakes). - 11/6/2019										
4000/3:Settlement	ft	26	0	0	0	0	100	26	0	0
Notes:East abutment is tipping (toe in). - 11/6/2019										
235/2:Timber Pier Cap	ft	52	0	0	100	52	0	0	0	0
1150/2:Check/Shake	ft	26	0	0	100	26	0	0	0	0
Notes:All timber has weather cracking - 11/6/2019										
4000/2:Settlement	ft	26	0	0	100	26	0	0	0	0
Notes:East cap has minor rotation - 11/6/2019										
330/1:Metal Bridge Railing	ft	49	0	0	92	45	8	4	0	0
1000/1:Corrosion	ft	45	0	0	100	45	0	0	0	0
Notes:Rail has minor corrosion - 11/6/2019										
1900/1:Distortion	ft	4	0	0	0	0	100	4	0	0
Notes:Traffic impact at NE corner - 11/6/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Minor rust appearing on the rails. - 11/6/2019										
331/2:Re Conc Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 6" x 12" yellow end markers on approach corners. Rough approaches. NW channel has been cleaned & riprapped. East abutment is tip (toe in) have been monitoring since 2013) measuring at pile # 1 & # 7 below the bearing cap with 2 ft level. 12/2/2013: Pile #1 = 2-1/2" Pile #7 = 2-1/2". 11/7/2015: Pile #1 = 2-5/8" Pile #7 = 2-3/4" 10/24/2017: Pile #1 = 1-3/8" Pile #7 = 1-1/2" - No change 11/19. - 11/6/2019

Alert Code 1: Railing has minor collision damage NE corner. E abut pile 1, 4, & 6 have impact damage. Many shallow deck spalls on wearing surface (top girder flanges)-up to 42" long. All pile have weather cracks. - 11/6/2019

Alert Code 2: East abutment tipping in & minor rotation on bearing cap. - 11/6/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-128-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	GUNKEL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 1 NORTH ARTHUR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 07' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 07' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	642655.7 5220542.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	November 15, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.7 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10-11X7-1X36' MULTIPLATE		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-128-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	72	51	37	49	35	0	0	0	0
1000/3:Corrosion	ft	35	0	0	100	35	0	0	0	0
Notes:Minor steel corrosion - 11/15/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	500	0	0	0	0	100	500	0	0
Notes:Minor deterioration of the steel coating - 11/15/2019										
8399/2:Slope Protection, RC	each	2	0	0	100	2	0	0	0	0
4000/2:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Both sides are buckled - 11/15/2019										

Remarks: No signing. - 11/15/2019

Alert Code 1: Minor deformity on both culvert. Concrete slope protection is cracked and buckled. Minor hole in slope on NW corner of slope protection. - 11/15/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-128-09.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	GUNKEL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00914 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST OF ARTHUR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	12.697	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 06' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 07' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	642622.8 5218917.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	0 Tons
27 Yr Built	2013 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	120 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 24, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	02/25/2014
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 12 X 4 X 60' RCBC		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-128-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	120	83	100	17	20	0	0	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B&A end markers on all corners. REPLACED WITH CONCRETE 12'X4'X60' DOUBLE BOX IN 2013. Minor separation & misalignment of sections.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-128-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HARMONY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 3 SOUTH OF AMENIA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 06' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	643381.2 5202841.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	6 Bituminous	64 Oper. Rating	HS 35 63 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 21 38 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1998 106 Yr Reconstructed	2002	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	7 Above Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	20 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	-1.00	71 Waterway Adequacy	7 Above Minimum
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	8 Equal Desirable Crit
Geometric Data		36 Traffic Safety Features	1 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	5 Stable w/in footing
32 Approach Roadway Width	20 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	October 16, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	24.0 Ft.	Fracture Critical	N
48 Length of Max Span	32 Ft.	Underwater	N
49 Structure Length	66.93 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	218 Channel Profile	1 48 05/22/2019
	0.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb		207 Transporter Erector Routes and Sites	-1
	24.0 Ft.	212 Structure Load Rated	03/06/2018
52 Deck Width	25.9 Ft.	213 Federal Aid Project Number	ORDER NO. 411-07682
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-128-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,742	100	1,742	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	1,742	99	1,732	1	10	0	0	0	0
3220/1:Crack (Wearing Surface)	sq.ft	10	0	0	100	10	0	0	0	0
Notes:HBP is cracked over pier - 10/16/2019										
107/2:Steel Opn Girder/Beam	ft	335	0	0	100	335	0	0	0	0
1000/2:Corrosion	ft	335	0	0	100	335	0	0	0	0
Notes:Minor corrosion of all steel elements - 10/16/2019										
515/2:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Non-existent - 10/16/2019										
202/3:Steel Column	each	16	0	0	100	16	0	0	0	0
1000/3:Corrosion	each	11	0	0	100	11	0	0	0	0
Notes:Minor corrosion of all steel elements - 10/16/2019										
1900/3:Distortion	each	5	0	0	100	5	0	0	0	0
Notes:Flanges of north pile have impact damage - 10/16/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Non-existent - 10/16/2019										
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	79	0	0	100	79	0	0	0	0
1000/2:Corrosion	ft	79	0	0	100	79	0	0	0	0
Notes:Minor corrosion of all steel elements - 10/16/2019										
515/2:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Non-existent - 10/16/2019										
332/2:Timb Bridge Railing	ft	134	0	0	100	134	0	0	0	0
1150/2:Check/Shake	ft	134	0	0	100	134	0	0	0	0
Notes:Minor wear of timber rail - 10/16/2019										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/3:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Rip rap is shifting - 10/16/2019										
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
1140/3:Decay/Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Fire damage to NE wing - 10/16/2019										

Remarks: 6"x12" yellow reflectors attached to rail - all 4 corners. Riprap is shifting. Deck has approx 1" asphalt overlay. Deck & backwalls were replaced in 2002, steel substructure is original. Deck straps on east bay only. - 10/16/2019

Alert Code 1: Minor substructure & girder rust. Deck straps are broken. Deck HBP is cracked above pier. SW embankment is sliding. Fire damage on NE wingwall. North pile flanges have impact damage. - 10/16/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-128-36.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	ADDISON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00950 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 37	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST OF DAVENPORT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.999	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 06' 56.00"	112 NBIS Bridge Length	No
GPS Coordinates XY	644022.2 5175410.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	160 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	October 22, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	9 Ft.	Other Special	N
49 Structure Length	20.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/10/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CB1801
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch, Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 9'X6'X54' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-128-36.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	108	100	108	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 01/06/2017 - Bridge replaced with a double 9' x 6' RCB. - 10/22/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-129-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	BELL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 1 SOUTH OF GRANDIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 13' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 05' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	644106.0 5231852.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 20 37 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 12 23 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1955 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	November 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	37 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/28/2016
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch, Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-129-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	958	99	950	1	8	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	8	0	0	100	8	0	0	0	0
Notes:Cracks at west end - 11/6/2019										
107/1:Steel Opn Girder/Beam	ft	200	0	0	100	200	0	0	0	0
1000/1:Corrosion	ft	200	0	0	100	200	0	0	0	0
Notes:All beam steel is corroded - 11/6/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Non-existent - 11/6/2019										
215/3:Re Conc Abutment	ft	49	0	0	90	44	10	5	0	0
1080/3:Delamination/Spall/Patched Area	ft	10	0	0	50	5	50	5	0	0
Notes:Spall deeper than 1" in east abutment beneath south girder. Several other shallow spalls. - 11/6/2019										
1130/3:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes:Cracking beneath beam seats in both abutments - 11/6/2019										
1190/3:Abrasion(PSC/RC)	ft	30	0	0	100	30	0	0	0	0
Notes:Both abutments are abraded at waterline - 11/6/2019										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
2210/3:Movement	each	2	0	0	100	2	0	0	0	0
Notes:Rip rap is shifting - 11/6/2019										
8401/3:Wings	each	4	75	3	0	0	25	1	0	0
1130/3:Cracking (RC and Other)	each	1	0	0	0	0	100	1	0	0
Notes:Large crack between SE wing and abutment, has been bolted to the abutment with steel channels. - 11/6/2019										

Remarks: 2. Vert. Curves both directions. Yellow end markers & white intermediate markers on bridge. Culvert installed in NW bank 2015. East abutment & wings have steel bracing ; girder # 1 & # 2 have steel bracing also. - 11/6/2019

Alert Code 1: South wingwalls have been tied to the abutments with steel straps. South girder was bent & had a rip & was repaired in 2012. Cracks in wingwalls, abutments & beam seat deterioration have been patched. New diaphragms placed 10/12 on south. 5"x14" spall at NW corner of deck. Scour under & north of structure. Backwalls under girder bearings spalled on east, cracked on west abut. - 11/6/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-129-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	BELL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST OF HUNTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 11' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 06' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	643537.5 5228617.1	Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 28 51 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 17 31 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1983 106 Yr Reconstructed	-1	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	65 30 Year of ADT	2019	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	September 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	47 Ft.	Other Special	N
49 Structure Length	100.07 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	06/27/2016
52 Deck Width	30.2 Ft.	213 Federal Aid Project Number	BRO-9(10)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevoid, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-129-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,014	96	2,900	4	114	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	50	0	0	100	50	0	0	0	0
Notes:Cracking with efflorescence on underside of deck - 9/24/2019										
1130/1:Cracking (RC and Other)	sq.ft	64	0	0	100	64	0	0	0	0
Notes:Random cracking throughout deck - 9/24/2019										
107/1:Steel Opn Girder/Beam	ft	400	100	400	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	97	29	3	1	0	0	0	0
215/3:Re Conc Abutment	ft	59	85	50	15	9	0	0	0	0
1130/3:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes:Cracks counted in concrete abutments - 9/24/2019										
313/2:Fixed Bearing	each	4	0	0	100	4	0	0	0	0
1020/2:Connection	each	4	0	0	100	4	0	0	0	0
Notes:Bearing bolts 1 S&N, 2 N & 4 N are loose or pushing up. - 9/24/2019										
515/2:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	200	100	200	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	200	74	148	26	52	0	0	0	0
1130/2:Cracking (RC and Other)	ft	52	0	0	100	52	0	0	0	0
Notes:Cracks counted in concrete bridge rail - 9/24/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Double B&A end marker on SW corner. SE deck / curb railing had cracked & honeycomb. - 9/24/2019

Alert Code 1: Minor random deck cracking - some soffit efflorescence visible. Pier has minor scalling & spalling at water line. Hairline cracking in abut girder seats. West abut undermined appx 8'x3". Collision damage at SE steel rail. Bearing bolts 1 S&N, 2 N & 4 N are loose or pushing up. - 9/24/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-129-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	DURBIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 2 SOUTH MAPLETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 06' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	644380.9 5191654.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 30 54 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 18 33 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1945 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.0 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 06/15/2017
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	22.3 Ft.	212 Structure Load Rated	06/27/2016
52 Deck Width	24.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-129-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	743	25	183	75	560	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	10	0	0	100	10	0	0	0	0
Notes:Several shallow spalls - 10/3/2019										
1130/1:Cracking (RC and Other)	sq.ft	50	0	0	100	50	0	0	0	0
Notes:Random minor deck cracking - 10/3/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	500	0	0	100	500	0	0	0	0
Notes:Deck is abraded. - 10/3/2019										
107/1:Steel Opn Girder/Beam	ft	154	90	139	10	15	0	0	0	0
1000/1:Corrosion	ft	15	0	0	100	15	0	0	0	0
Notes:Minor corrosion to steel - 10/3/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	10	100	90	899	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	10	100	90	899	0	0
Notes:10% substantial and 90% limited effectiveness - 10/3/2019										
215/3:Re Conc Abutment	ft	49	74	36	20	10	6	3	0	0
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Shallow spall beneath Girder 4 at north abutment. - 10/3/2019										
1130/3:Cracking (RC and Other)	ft	11	0	0	73	8	27	3	0	0
Notes:Minor to moderate abutment cracks - 10/3/2019										
331/2:Re Conc Bridge Railing	ft	62	0	0	100	62	0	0	0	0
1190/2:Abrasion(PSC/RC)	ft	62	0	0	100	62	0	0	0	0
Notes:entire rail has wear - 10/3/2019										
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Some flood debris in superstructure. Heavy channel vegetation. 10/19:Unable to verify slope protection condition due to high water. - 10/3/2019

Alert Code 1: Minor to moderate abutment cracking. Shallow spall beneath Girder 4 at north abutment. Paint peeled to base metal-rust evident 90% of surface. - 10/3/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-129-26.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	DURBIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 2 SOUTH MAPLETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 52' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 06' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	644370.5 5192090.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	6 Bituminous	64 Oper. Rating	HS 34 61 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 20 36 Tons
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	0 Tons
27 Yr Built	2015 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	71 Ft.	Other Special	N
49 Structure Length	222.22 Ft.	218 Channel Profile	1 48 06/15/2017
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/09/2015
	28.0 Ft.	213 Federal Aid Project Number	BRO-0009(044)
52 Deck Width	30.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-129-26.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	6,440	99	6,380	1	60	0	0	0	0
1120/2:Efflorescence/Rust Staining	sq.ft	60	0	0	100	60	0	0	0	0
Notes:Several hairline deck cracks with soffit efflorescence visible. - 10/3/2019										
1130/2:Cracking (RC and Other)	sq.ft	60	100	60	0	0	0	0	0	0
Notes:Hairline transverse deck cracking - 10/3/2019										
104/3:Pre Clsd Box Girder	ft	859	100	859	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	63	100	63	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	64	100	64	0	0	0	0	0	0
313/3:Fixed Bearing	each	16	100	16	0	0	0	0	0	0
330/3:Metal Bridge Railing	ft	429	100	429	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Stream gaging station located at NE corner of structure. - 10/3/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-129-26.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	DURBIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 2 SOUTH MAPLETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 07' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	643536.4 5191502.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 21 38 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 12 23 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	18 Tons
Age and Service		Appraisal	
27 Yr Built	1984 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 03, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	59 Ft.	218 Channel Profile	1 48 06/15/2017
49 Structure Length	116.14 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	06/27/2016
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-129-26.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	2,788	0	0	100	2,788	0	0	0	0
1180/1:Abrasion	sq.ft	2,788	0	0	100	2,788	0	0	0	0
Notes:Abrasion throughout the deck - 10/3/2019										
107/1:Steel Opn Girder/Beam	ft	581	0	0	100	581	0	0	0	0
1000/1:Corrosion	ft	581	0	0	100	581	0	0	0	0
Notes:Minor girder corrosion throughout structure - 10/3/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	50	50	50	50	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	50	50	50	50	0	0
Notes:50% Substantial & 50% limited paint effectiveness. Paint peeling to base metal Rust evident 50%. - 10/3/2019										
202/3:Steel Column	each	16	0	0	100	16	0	0	0	0
1000/3:Corrosion	each	16	0	0	100	16	0	0	0	0
Notes:Minor corrosion on all columns - 10/3/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Paint system is not effective - 10/3/2019										
216/2:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1180/2:Abrasion	ft	25	0	0	100	25	0	0	0	0
Notes:Minor abrasion to all abutment surfaces - 10/3/2019										
4000/2:Settlement	ft	24	0	0	100	24	0	0	0	0
Notes:Minor backwall settlement and cap rotation at east abutment. - 10/3/2019										
231/1:Steel Pier Cap	ft	72	0	0	100	72	0	0	0	0
1000/1:Corrosion	ft	72	0	0	100	72	0	0	0	0
Notes:Pier caps have minor corrosion - 10/3/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No effectiveness to coating on pier caps - 10/3/2019										
235/2:Timber Pier Cap	ft	48	0	0	100	48	0	0	0	0
1180/2:Abrasion	ft	48	0	0	100	48	0	0	0	0
Notes:timber caps have minor abrasion throughout - 10/3/2019										
332/2:Timb Bridge Railing	ft	233	100	233	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Old pile in channel. Channel has minor debris accumulation. Channel bank - nw quadrant is sliding. Posted for 18 tons. 2 culverts with flap gates. 10/15 - timber pier cap replaced with steel cap. Installed new bearing plates on North Abutment. - 10/3/2019

Alert Code 1: Paint peeling to base metal Rust evident 50%. Minor cap rotation & backwall settlement east abutment. Piling has section loss at water line-10/19: unable to verify section loss due to high water. - 10/3/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-130-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	HARMONY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 2 WEST MAPLETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	27.994	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 05' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	645253.5 5196452.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1999 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	575 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	August 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	59.7 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	60.0 Ft.	213 Federal Aid Project Number	BRC-0930(54)
52 Deck Width	62.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
DOUBLE, 12X8X62' PRECAST RCB			

Structure Number: 09-130-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	125	98	122	2	3	0	0	0	0
Notes:One 3' crack in the SW corner of the precast box - 8/20/2019										
1010/3:Cracking	ft	3	0	0	100	3	0	0	0	0
Notes:One crack measured at 3 feet in the SW corner from the parapet to the box wall. - 8/20/2019										
4000/1:Settlement	each	1	100	1	0	0	0	0	0	0
Notes:Minor settlement in the box some of the precast sections are not flush. - 8/20/2019										
8398/3:Slope Protection	each	4	100	4	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Single B&A end markers on all corners. Heavy channel vegetation. Rip-rap in channel. Shear cracking at the SW corner of box/wing wall. Grout between precast sections is starting to pop out. Minor miss alignment in the box sections. - 8/20/2019

Alert Code 1: Minor misalignment of barrels. South end of west box has minor delamination on roof. Minor roadway settlement over culvert. - 8/20/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-131-19.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	HARMONY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00941 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 NORTH OF MAPLETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	23.495	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 03' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	648239.6 5203283.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 34 61 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	365 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	August 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.8 Ft.	Underwater	N
48 Length of Max Span	30 Ft.	Other Special	N
49 Structure Length	64.96 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/06/2018
	32.2 Ft.	213 Federal Aid Project Number	CBRS-0941(51)
52 Deck Width	34.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-131-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,260	96	2,159	2	49	2	52	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	2	0	0	100	2	0	0	0	0
Notes:Bridge Deck over hang has a spall on the east side span 2. The spall is 1.5' x 3" with no rebar visible. - 8/21/2019										
1120/1:Efflorescence/Rust Staining	sq.ft	12	0	0	100	12	0	0	0	0
Notes:Minor rust staining on the deck overhang above the pier on the east side. - 8/21/2019										
1130/1:Cracking (RC and Other)	sq.ft	2,223	97	2,161	0	10	2	52	0	0
Notes:Moderate, cracking in 3 locations the full width of the deck (CS3), Minor random cracking throughout the deck mostly near the bridge approaches (10 cracks CS2). - 8/21/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	25	0	0	100	25	0	0	0	0
Notes:The bridge deck has areas on the deck with exposed coarse aggregate. Aggregate remains secure in concrete - 8/21/2019										
104/1:Pre Cld Box Girder	ft	259	100	259	0	0	0	0	0	0
Notes:There was some high water staining on the box girders, but no cracking. There was some minor surface finish blemishes but no spalls. - 8/21/2019										
210/3:Re Conc Pier Wall	ft	36	92	33	8	3	0	0	0	0
1130/3:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
Notes:There was 3 vertical CS2 cracks in the pier wall, crack width are between .012 - .05" - 8/21/2019										
215/2:Re Conc Abutment	ft	69	71	49	29	20	0	0	0	0
Notes:Both abutments have longitudinal cracks of approximately 10 feet. The abutment looks to have been poured in multiply placements and a crack is forming at the cold joints. There is some minor surface finish cracking that is insignificant. - 8/21/2019										
1130/2:Cracking (RC and Other)	ft	69	71	49	29	20	0	0	0	0
Notes:N abut has many hairline cracks that are insignificant (surface finish cracks) both abutments have cracking between the cold joints as the abutment appears to be placed in multiply pours. - 8/21/2019										
331/2:Re Conc Bridge Railing	ft	131	76	100	24	31	0	0	0	0
1130/2:Cracking (RC and Other)	ft	31	0	0	100	31	0	0	0	0
Notes:Random cracking throughout barriers. - 8/21/2019										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/3:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Slope protection has settled throughout channel. - 8/21/2019										
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
6000/2:Scour	each	4	0	0	100	4	0	0	0	0
Notes:Scour around all wingwalls causing undermining of approach slabs. Approaches settled & tipped, opening barrier joint to water intrusion. Erosion at NW corner of bridge. Both approaches slab have undermined. - 8/21/2019										

Remarks: NW wingwall has been extended with sheet pile by about 20'. - 8/21/2019

Alert Code 1: Moderate, random deck cracking - soffit efflorescence visible. Minor spalls & chips in north span to beams, deck & top of pier E&W. Rock dam under bridge causing scour hole on W side. Approaches settled & tipped, opening barrier joint to water intrusion. Erosion at NW corner of bridge. N abut has many hairline cracks. Both approaches slab have undermined, west guard rail has minor damaged. - 8/21/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-131-21.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	76.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	HARMONY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00941 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH OF MAPLETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	18.896	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 03' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	648246.7 5200305.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 37 67 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 15 27 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	36 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1958 106 Yr Reconstructed	1974	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	330 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	36 Ft.	90 Date of Last Inspection	August 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	47 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 06/15/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.5 Ft.	212 Structure Load Rated	12/20/2011
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-131-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	499	100	497	0	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:East abut/deck corners broken out, S has corroded rebar. - 8/21/2019										
1120/1:Efflorescence/Rust Staining	ft	1	0	0	100	1	0	0	0	0
Notes:SW weep hole has efflorescence and rust forming around the drain. - 8/21/2019										
510/1:Wearing Surfaces	sq.ft	1	0	0	100	1	0	0	0	0
Notes:SW weep hole has efflorescence and rust forming around the drain. - 8/21/2019										
3220/1:Crack (Wearing Surface)	sq.ft	1	0	0	100	1	0	0	0	0
Notes:SW weep hole has efflorescence and rust forming around the drain. - 8/21/2019										
215/3:Re Conc Abutment	ft	59	0	0	49	29	51	30	0	0
1080/3:Delamination/Spall/Patched Area	ft	14	0	0	100	14	0	0	0	0
Notes:There is some minor spalling on the south abutment - 8/21/2019										
1130/3:Cracking (RC and Other)	ft	15	0	0	100	15	0	0	0	0
Notes:Both abutments have vertical cracks - 8/21/2019										
4000/3:Settlement	ft	30	0	0	0	0	100	30	0	0
Notes:N abut is out of plumb. Minor scour under structure. S abut is slightly out of plumb, appears to have been constructed that way. - 8/21/2019										
330/1:Metal Bridge Railing	ft	98	100	98	0	0	0	0	0	0
7000/1:Damage	ft	10	100	10	0	0	0	0	0	0
Notes:Metal Bridge Railing has minor impact damage beams railing is still functional - 8/21/2019										
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
6000/3:Scour	each	2	0	0	100	2	0	0	0	0
Notes:Minor scour under structure. South slope protection pulled away from abut. - 8/21/2019										
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
6000/3:Scour	each	2	0	0	100	2	0	0	0	0
Notes:West wings have minor scour. - 8/21/2019										

Remarks: Double B&A end marker on NW corner. - 8/21/2019

Alert Code 1: Minor scour under structure. S abut is slightly out of plumb, appears to have been constructed that way. Longitudinal cracking on HBP overlay with water seepage thru bottom of beams. West wings have minor scour. South slope protection pulled away from abut. East abut/beam corners broken out, S has corroded rebar in the wing exposed. Approaches settled. - 8/21/2019

Alert Code 2: N abut is out of plumb in 2'-measured top half - 10/07 1" NE, 7/8" NW; 11/09@37D 1 5/8" NE, 1 7/16" NW; 11/11@55D 1-5/8" NE / 1-1/2" NW; 10/13@35D 1 3/4" NE, 1 3/8" NW; 10/15@51D NE 2 1/4", NW 1 5/8"; 08/21 - NW 1 1/2" NE 1 3/4" @ 74 Degrees - 8/21/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-131-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	HARMONY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH OF MAPLETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	18.896	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 03' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	648299.8 5196481.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 39 71 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1994 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	390 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	36 Ft.	90 Date of Last Inspection	August 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	35.8 Ft.	Underwater	N
48 Length of Max Span	54 Ft.	Other Special	N
49 Structure Length	170.93 Ft.	218 Channel Profile	1 48 06/15/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/06/2018
	37.4 Ft.	213 Federal Aid Project Number	BRC 0941(53)
52 Deck Width	37.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-131-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	6,415	68	4,377	32	2,038	0	0	0	0
1090/1:Exposed Rebar	sq.ft	668	0	0	100	668	0	0	0	0
Notes:Soffits on both sides of the deck are showing rebar with rust staining. - 8/19/2019										
1130/1:Cracking (RC and Other)	sq.ft	10	0	0	100	10	0	0	0	0
Notes:Random Cracking on the North end of the deck - 8/19/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	1,360	0	0	100	1,360	0	0	0	0
Notes:The concrete deck is showing signs of wearing with smaller sized aggregate exposed, and some pitting, - 8/19/2019										
520/1:Conc Re Prot Sys	sq.ft	596	100	596	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	856	100	856	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	75	100	75	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	75	100	75	0	0	0	0	0	0
301/2:Pourable Joint Seal	ft	75	0	0	100	75	0	0	0	0
Notes:Pourable Joints have sunken and filled with debris - 8/19/2019										
2350/2:Debris Impaction	ft	75	0	0	100	75	0	0	0	0
Notes:Pourable Joints have sunken and filled with debris - 8/19/2019										
321/1:Re Conc Approach Slab	sq.ft	999	100	999	0	0	0	0	0	0
Notes:Overlaid - 8/19/2019										
330/1:Metal Bridge Railing	ft	341	93	316	7	25	0	0	0	0
Notes:Impact Damage on East Rail - 8/19/2019										
7000/1:Damage	ft	25	0	0	100	25	0	0	0	0
Notes:Impact Damage on east rail - 8/19/2019										
515/1:Steel Protective Coating	sq.ft	999	99	989	1	10	0	0	0	0
Notes:minor scratches in protective coating from traffic not enough to - 8/19/2019										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: USGS sensor mounted on east side of structure with conduit leading to doghouse on NE corner. - 8/19/2019

Alert Code 1: Slope protection settled on middle span. Approaches settled and overlaid. Beam 1 diaphragm on south pier, west side is spalled & cracked with exposed rebar. Hairline horizontal cracks on beam 5 span 1. Soffit spalling & exposed rebar on overhangs, both sides, full length - 8/19/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-132-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	64.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	RAYMOND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST OF PROSPER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 02' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	648419.3 5202988.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	44 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	25 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	32 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1954 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	220 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	14.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 10, 2019
32 Approach Roadway Width	32 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/15/2017
49 Structure Length	60.04 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	06/27/2016
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-132-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,561	99	1,540	1	21	0	0	0	0
1090/1:Exposed Rebar	sq.ft	10	0	0	100	10	0	0	0	0
Notes:Corroded rebar on soffit. - 6/10/2019										
1130/1:Cracking (RC and Other)	sq.ft	11	0	0	100	11	0	0	0	0
Notes:Minor soffit cracking & spalling with efflorescence. - 6/10/2019										
510/1:Wearing Surfaces	sq.ft	145	82	119	18	26	0	0	0	0
3230/1:Effectiveness (Wearing Surface)	sq.ft	145	82	119	18	26	0	0	0	0
Notes:Minor cracks & spalls in HBP overlay. - 6/10/2019										
107/1:Steel Opn Girder/Beam	ft	299	0	0	100	299	0	0	0	0
1000/1:Corrosion	ft	299	0	0	100	299	0	0	0	0
Notes:Paint peeled to base metal-rust evident-75% of surface area. - 6/10/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Paint peeled to base metal-rust evident-75% of surface area. - 6/10/2019										
210/2:Re Conc Pier Wall	ft	26	0	0	0	0	100	26	0	0
1080/2:Delamination/Spall/Patched Area	ft	26	0	0	0	0	100	26	0	0
Notes:S side of pier has poorly consolidated concrete just above footing. Pier & E footing have deteriorated concrete on footing & in wall at footing. - 6/10/2019										
215/2:Re Conc Abutment	ft	52	31	16	19	10	50	26	0	0
1130/2:Cracking (RC and Other)	ft	52	31	16	19	10	50	26	0	0
Notes:Minor abut cracking & spalling with efflorescence. - 6/10/2019										
234/1:Re Conc Pier Cap	ft	26	58	15	42	11	0	0	0	0
1120/1:Efflorescence/Rust Staining	ft	26	58	15	42	11	0	0	0	0
Notes:Deck drains are above the pier cap & deteriorating concrete. - 6/10/2019										
330/1:Metal Bridge Railing	ft	121	0	0	100	121	0	0	0	0
1000/1:Corrosion	ft	111	0	0	100	111	0	0	0	0
Notes:Minor freckle rust & chalking. - 6/10/2019										
1020/1:Connection	ft	10	0	0	100	10	0	0	0	0
Notes:Both rails have missing bolt connections. - 6/10/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Minor freckle rust & chalking. - 6/10/2019										
331/1:Re Conc Bridge Railing	ft	121	94	114	6	7	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	7	0	0	100	7	0	0	0	0
Notes:Minor spalls throughout curb. - 6/10/2019										
8398/3:Slope Protection	each	2	0	0	0	0	0	0	100	2
6000/3:Scour	each	2	0	0	0	0	0	0	100	2
Notes:Moderate scour has exposed pier and east abutment footings. - 6/10/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

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SEC 409

Structure Number: 09-132-19.0

Remarks: Double B&A end markers on approach corners broke off. - 6/10/2019

Alert Code 1: Joint over pier is open 10/07"@56D 1 3/8; 11/09@47D 1 5/16"; 11/11@55D 1 1/2". Curb measured 10/13@35D: N 1 1/4", S 1 1/2": 10/15@51D: N 1 1/4", S 1 1/4": 10/17@61D: N 1/2", S 3/8". 10/07 N 1 1/2" S 1 1/4" @52 D Paint peeled to base metal-rust evident-75% of surface area. Moderate scour has exposed pier and east abutment footings. S side of pier has poorly consolidated concrete just above footing. Pier & E footing have deteriorated concrete on footing & in wall at footing. Corroded rebar on soffit. Minor soffit & abut cracking & spalling with efflorescence. Minor cracks & spalls in HBP overlay. Deck drains are above the pier cap & deteriorating concrete. Both rails have missing bolt connections. Minor spalls throughout curb. - 6/10/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-132-19.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	87.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	RAYMOND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 12	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF PROSPER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 01' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	649648.5 5203036.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 27 49 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 29 Tons
208 Dk Overburden	32 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1966 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	220 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	32 Ft.	90 Date of Last Inspection	June 10, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	53 Ft.	Other Special	N
49 Structure Length	55.12 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	1.6 Ft Rt-Side	Chaining Date	None
	1.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/06/2018
52 Deck Width	31.2 Ft.	213 Federal Aid Project Number	CS-758(2)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-132-19.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	551	96	531	4	20	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
Notes:Minor spalls soffit of girder 4, 5 & 6. - 6/10/2019										
1110/1:Cracking (PSC)	ft	10	0	0	100	10	0	0	0	0
Notes:Hairline crack in girder 1, west end. Water intrusion between girders. - 6/10/2019										
510/1:Wearing Surfaces	sq.ft	1,720	100	1,720	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	62	61	38	32	20	7	4	0	0
1080/2:Delamination/Spall/Patched Area	ft	4	0	0	0	0	100	4	0	0
Notes:E abut spalled under girder 8. - 6/10/2019										
1130/2:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:Water intrusion both abuts. E abut cracked with efflorescence at outside girder bearings. E abut has horiz. crack 4' below girders. - 6/10/2019										
6000/2:Scour	ft	10	0	0	100	10	0	0	0	0
Notes:Minor scour under structure. - 6/10/2019										
330/1:Metal Bridge Railing	ft	112	0	0	100	112	0	0	0	0
1000/1:Corrosion	ft	112	0	0	100	112	0	0	0	0
Notes:Freckle rust & chalking throughout railing. - 6/10/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Freckle rust & chalking throughout railing. - 6/10/2019										
331/1:Re Conc Bridge Railing	ft	112	89	100	11	12	0	0	0	0
1090/1:Exposed Rebar	ft	12	0	0	100	12	0	0	0	0
Notes:SE rail post spalled with corroded rebar. - 6/10/2019										
8398/3:Slope Protection	each	2	0	0	0	0	0	0	100	2
2210/3:Movement	each	2	0	0	0	0	0	0	100	2
Notes:Riprap is sliding. - 6/10/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
1130/2:Cracking (RC and Other)	each	4	100	4	0	0	0	0	0	0

Remarks: Double B&A end markers on approach corners. Yellow RPM tabs on top of rail. - 6/10/2019**Alert Code 1:** Hairline crack in girder1 W end. Minor spalls soffit of girder 4, 5 & 6. E abut spalled under girder 8. Water intrusion both abuts & b/w girders. Riprap is sliding. All wings cracked & spalled. SE rail post spalled with corroded rebar. E abut cracked with efflorescence at outside girder bearings. E abut has horiz. crack 4' below girders. Minor scour under structure. - 6/10/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-132-19.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	RAYMOND TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 12	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF PROSPER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 01' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	649825.4 5203107.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	6 Bituminous	64 Oper. Rating	HS 36 65 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 21 39 Tons
208 Dk Overburden	31 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1941 106 Yr Reconstructed	1995	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	6 Equal Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	30 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	-1.00	71 Waterway Adequacy	7 Above Minimum
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	7 Above Min Criteria
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	13 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	June 10, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	24.0 Ft.	Fracture Critical	N
48 Length of Max Span	38 Ft.	Underwater	N
49 Structure Length	40.03 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	218 Channel Profile	1 48 05/15/2017
	0.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	207 Transporter Erector Routes and Sites	-1
52 Deck Width	26.6 Ft.	212 Structure Load Rated	06/27/2016
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Czczok
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-132-19.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,055	99	1,049	0	0	1	6	0	0
7000/1:Damage	sq.ft	6	0	0	0	0	100	6	0	0
Notes:3 deck planks on the NW & by west rail 3 have minor damage. - 6/10/2019										
510/1:Wearing Surfaces	sq.ft	1,055	0	0	0	0	81	855	19	200
3230/1:Effectiveness (Wearing Surface)	sq.ft	1,055	0	0	0	0	81	855	19	200
Notes:South end of timber deck is exposed, HBP wearing surface is no longer effective. - 6/10/2019										
107/1:Steel Opn Girder/Beam	ft	200	0	0	100	200	0	0	0	0
1000/1:Corrosion	ft	200	0	0	100	200	0	0	0	0
Notes:Minor corrosion on beams. - 6/10/2019										
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Minor corrosion on beams. - 6/10/2019										
215/3:Re Conc Abutment	ft	43	0	0	93	40	7	3	0	0
1080/3:Delamination/Spall/Patched Area	ft	3	0	0	0	0	100	3	0	0
Notes:Spalling on bearing seats in all four corners - 6/10/2019										
1130/3:Cracking (RC and Other)	ft	40	0	0	100	40	0	0	0	0
Notes:Backwall cracking at NW, NE & SW corners. - 6/10/2019										
332/1:Timb Bridge Railing	ft	79	90	71	10	8	0	0	0	0
1140/1:Decay/Section Loss	ft	4	0	0	100	4	0	0	0	0
Notes:Rail post 2 on the east side has section loss/decay - 6/10/2019										
7000/1:Damage	ft	4	0	0	100	4	0	0	0	0
Notes:Rail post 7 on west side is missing. - 6/10/2019										
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
2210/3:Movement	each	1	0	0	100	1	0	0	0	0
Notes:SW riprap no longer in place. - 6/10/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Beaver dam on east of structure. - 6/10/2019

Alert Code 1: Spalling on bearing seats beam 1 N&S, 2 S. Rail post 7 on west side is missing. 3 deck planks on the NW & by west rail 3 have minor damage. Backwall cracking at NW, NE & SW corners. South end of timber deck is exposed, HBP wearing surface is no longer effective. Minor corrosion on beams. - 6/10/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-132-32.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	WARREN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00944 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 14	102 Direction of Traffic	2 2-way traffic
09 Location	7 SOUTH OF MAPLETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	31.394	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 46' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 02' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	649428.0 5182054.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2004 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	175 30 Year of ADT 2017	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	8.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 26, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X10X72' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-132-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
245/3:Pre Concrete Culvert	ft	142	100	142	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: West barrel has 2" silt accumulation. Moderate erosion at side pipes in nw, ne, & sw quadrants. E wall/ E box sect # 6 have spall 12"x4" @ joint., Minor infiltration @ joint E. wall Sect #4. Separated joint up to 2", misaligned 1/2".

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-132-34.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	WARREN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 14	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 2 NORTH DAVENPORT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 44' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 02' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	649150.8 5178832.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 28, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.0 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	12/14/2018
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevoid, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 8 X8 X 52' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-132-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
243/1:Other Culvert	ft	104	100	104	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: BRIDGE REPLACED WITH A RCB IN 2018 - 10/28/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-132-36.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	ADDISON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 34	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST OF DAVENPORT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 06' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	648887.1 5175572.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 09, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/06/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CB1303
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 12 X 6 X 54' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-132-36.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	108	83	90	17	18	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	8	0	0	100	8	0	0	0	0
1130/3:Cracking (RC and Other)	ft	10	100	10	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: _REMARKS: Single B/A in all corners. New installed in 2016 It not showing in the county map., rust staining & thermal cracked in randomly segments.

Alert Code 1: Minor misalignment & separation installed

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-132-39.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	NORMANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 34	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 3 SOUTH DAVENPORT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 40' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 03' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	649041.7 5170714.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1953 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	120 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 22, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevoid, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X5X30' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-132-39.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	59	49	29	51	30	0	0	0	0
1130/3:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:Cracking in box walls - 10/22/2019										
1190/3:Abrasion(PSC/RC)	ft	20	0	0	100	20	0	0	0	0
Notes:Abrasion from high velocity water flow - 10/22/2019										
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: PVC end markers at NE and SW corners. 2' deep scour holes at both ends of structure. North banks are sliding. Side pipe scour in all four quadrants. Minor scaling of interior walls. Minor spalling of both parapets & nw wingwall. - 10/22/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-133-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	61.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	GARDNER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 23	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST OF GARDNER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 08' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 00' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	651215.0 5222340.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	B Posting Recommended
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 14 26 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 9 17 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	0 Tons
Age and Service		Appraisal	
27 Yr Built	1946 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	30 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 13, 2019
32 Approach Roadway Width	17 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.6 Ft.	Other Special	N
48 Length of Max Span	31 Ft.	218 Channel Profile	1 48 05/15/2017
49 Structure Length	34.12 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/27/2016
51 Bridge Rdwy Width - Curb to Curb	24.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-133-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	840	95	798	5	42	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	42	0	0	100	42	0	0	0	0
Notes:Minor cracking in deck - 11/13/2019										
107/1:Steel Opn Girder/Beam	ft	171	0	0	100	171	0	0	0	0
1000/1:Corrosion	ft	171	0	0	100	171	0	0	0	0
Notes:Minor corrosion - 11/13/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Non-existent - 11/13/2019										
206/2:Timber Column	each	12	75	9	25	3	0	0	0	0
1170/2:Split/Delamination (Timber)	each	3	0	0	100	3	0	0	0	0
Notes:Piles split on S 3 & N 2&6. - 11/13/2019										
216/2:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	52	0	0	100	52	0	0	0	0
1150/2:Check/Shake	ft	52	0	0	100	52	0	0	0	0
Notes:Minor horizontal shallow shakes - 11/13/2019										
8401/2:Wings	each	4	50	2	0	0	0	0	50	2
7000/2:Damage	each	2	0	0	0	0	0	0	100	2
Notes:NW & NE wings are gone - 11/13/2019										

Remarks: No curb or railing. Yellow markers on approach corners. 10/16/19: Cannot access structure due to soft roads. - 11/13/2019

Alert Code 1: Paint peeled to base metal-rust evident. Scour under structure has undermined corners of south abutment. Both caps crushing. Piles split & hollow S 1,3 & 6 N 2&6. NW and NE wings are gone, SW and SE are buried. - 11/13/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-133-18.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	BERLIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST OF HARWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 58' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 00' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	651595.6 5204699.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 28 51 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2002 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	June 10, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	52 Ft.	Other Special	N
49 Structure Length	138.12 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	04/02/2003
	27.9 Ft.	213 Federal Aid Project Number	BRO-9(026)
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-133-18.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,263	99	4,207	1	56	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	56	0	0	100	56	0	0	0	0
Notes:Minor spalls on soffit at rail attachments. Minor soffit efflorescence on center span. - 6/10/2019										
520/1:Conc Re Prot Sys	sq.ft	396	100	396	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	531	100	531	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	72	86	62	14	10	0	0	0	0
6000/3:Scour	ft	10	0	0	100	10	0	0	0	0
Notes:Minor scour at piers. - 6/10/2019										
215/2:Re Conc Abutment	ft	79	99	78	1	1	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Minor spalls on north abut. - 6/10/2019										
330/1:Metal Bridge Railing	ft	276	96	266	4	10	0	0	0	0
7000/1:Damage	ft	10	0	0	100	10	0	0	0	0
Notes:Minor scratches on rail. - 6/10/2019										
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
7000/1:Damage	sq.ft	10	0	0	100	10	0	0	0	0
Notes:Minor scratches on rail. - 6/10/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	50	2	50	2	0	0	0	0
1080/2:Delamination/Spall/Patched Area	each	2	0	0	100	2	0	0	0	0
Notes:Minor spalls on NW wingwall. - 6/10/2019										

Remarks: Minor guardrail damage NE & SW. - 6/10/2019

Alert Code 1: Minor scour at piers. Minor spalls on soffit at rail attachments, north abut & on NW and NE wingwall. North side south pier diaphragm spalled W side beam 3. Minor scratches on rail. Minor soffit efflorescence on center span. West side of girder 3 has a crack with efflorescence showing. - 6/10/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-133-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	RAYMOND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RAYMOND COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 1 SOUTH PROSPER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 00' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	651476.2 5201253.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 23 42 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1987 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	59 Ft.	Other Special	N
49 Structure Length	62.99 Ft.	218 Channel Profile	1 48 05/30/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/06/2018
	29.2 Ft.	213 Federal Aid Project Number	TB-8607-RA16W
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-133-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	505	100	505	0	0	0	0	0	0
1110/1:Cracking (PSC)	ft	35	100	35	0	0	0	0	0	0
Notes:Minor leaking of joints. No water staining present in inspection 2019 - 8/21/2019										
215/2:Re Conc Abutment	ft	66	97	64	3	2	0	0	0	0
1130/2:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
Notes:Minor random cracking. - 8/21/2019										
331/1:Re Conc Bridge Railing	ft	125	97	121	3	4	0	0	0	0
1130/1:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:Minor random cracking. - 8/21/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	50	2	50	2	0	0	0	0
6000/2:Scour	each	2	0	0	100	2	0	0	0	0
Notes:Minor Erosion behind SW & NW wingwalls. - 8/21/2019										

Remarks: Yellow markers all corners. - 8/21/2019**Alert Code 1:** Erosion behind SW & NW wingwalls. Minor leaking of joints. Minor random cracking in abutments & barriers. - 8/21/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-133-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	88.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	RAYMOND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 2 NORTH MAPLETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 00' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	651516.5 5198375.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 26 47 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1953 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	28.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	74 Ft.	Other Special	N
49 Structure Length	80.05 Ft.	218 Channel Profile	1 48 06/15/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/09/1991
	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-133-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
15/1:Pre Concrete Top Flange	sq.ft	640	100	640	0	0	0	0	0	0
Notes:Elem added 9/12/19 cta - 8/20/2019										
104/1:Pre Clsd Box Girder	ft	640	93	592	8	48	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	42	0	0	100	42	0	0	0	0
Notes:Concrete on top of outside beams below curb is deteriorated beam weep holes have efflorescence showing. Minor leaking between beams. - 8/20/2019										
1120/1:Efflorescence/Rust Staining	ft	6	0	0	100	6	0	0	0	0
Notes:Beam 1 has efflorescence on the bottom of the box girder - 8/20/2019										
202/3:Steel Column	each	6	0	0	100	6	0	0	0	0
1000/3:Corrosion	each	6	0	0	100	6	0	0	0	0
Notes:Piling have minor rust, moderate with minor section loss at water line. - 8/20/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	80	800	20	199
3440/3:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	80	800	20	199
Notes:Piling have minor rust, moderate with minor section loss at water line. - 8/20/2019										
215/3:Re Conc Abutment	ft	66	86	57	6	4	8	5	0	0
1130/3:Cracking (RC and Other)	ft	9	0	0	44	4	56	5	0	0
Notes:Old abutment cracking. Moderate vertical cracked on both abutment stems. - 8/20/2019										
231/1:Steel Pier Cap	ft	59	0	0	100	59	0	0	0	0
1000/1:Corrosion	ft	59	0	0	100	59	0	0	0	0
Notes:Pile caps have minor rust. - 8/20/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Pile caps have minor rust. - 8/20/2019										
331/1:Re Conc Bridge Railing	ft	161	0	0	100	161	0	0	0	0
7000/1:Damage	ft	161	0	0	100	161	0	0	0	0
Notes:Precast curb sections are loose & misaligned. - 8/20/2019										
8398/2:Slope Protection	each	2	0	0	100	2	0	0	0	0
2210/2:Movement	each	2	0	0	100	2	0	0	0	0
Notes:Only slope protection on south wings. Protection has moved. - 8/20/2019										
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
Notes:NW and NE wings have cracks - 8/20/2019										
1130/2:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
Notes:NW and NE abutment have cracks in the middle of the wings - 8/20/2019										
6000/2:Scour	each	2	0	0	100	2	0	0	0	0
Notes:Scour along north wings. - 8/20/2019										

Remarks: Yellow end markers at NE, NW & SW corners, hidden by weeds. - 8/20/2019

Alert Code 1: Precast curb sections are loose & misaligned. Piling & caps have minor rust, moderate with minor section loss at water line. Concrete on top of outside beams below curb is deteriorated beam weep holes have efflorescence showing. Old abutment cracking. Moderate vertical cracked on both abutment stems. Minor leaking between beams. - 8/20/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-133-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	MAPLETON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 14	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 2 SOUTH MAPLETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 01' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	650666.8 5191761.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	6 Bituminous	64 Oper. Rating	HS 45 81 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 26 48 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	32.5 Ft.	Underwater	N
48 Length of Max Span	50 Ft.	Other Special	N
49 Structure Length	51.84 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	32.8 Ft.	213 Federal Aid Project Number	TB8923-MN17N
52 Deck Width	34.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-133-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	1,808	100	1,808	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	168	100	168	0	0	0	0	0	0
202/2:Steel Column	each	12	100	12	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Paint system not effective - 10/3/2019										
216/2:Timber Abutment	ft	36	100	36	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	69	100	69	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Paint system not effective - 10/3/2019										
235/2:Timber Pier Cap	ft	69	51	35	49	34	0	0	0	0
1170/2:Split/Delamination (Timber)	ft	34	0	0	100	34	0	0	0	0
Notes:Minor split thru the length of west cap - 10/3/2019										
332/1:Timb Bridge Railing	ft	423	100	423	0	0	0	0	0	0
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: B&a end markers all corners, MINOR FIRE DAMAGE ON SW COR OF STRUCTURE . 10/15 - Erosion behind wingwalls in all four corners 10/19:Could not verify slope protection settlement due to high water. - 10/3/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-133-26.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	MAPLETON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00941 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 14	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 SOUTH MAPLETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	16.796	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 52' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 00' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	651584.3 5192663.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	60 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	36 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1946 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	250 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 03, 2019
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.5 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 06/11/2019
49 Structure Length	41.99 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	07/26/2017
51 Bridge Rdwy Width - Curb to Curb	28.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-133-26.1

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-133-26.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,270	92	1,170	7	94	1	6	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	64	0	0	100	64	0	0	0	0
Notes:Deck has moderate spalling and a large crack in the NB lane over the south abutment. - 10/3/2019										
1130/1:Cracking (RC and Other)	sq.ft	36	0	0	83	30	17	6	0	0
Notes:large crack in the NB lane over the south abutment, several other smaller cracks across the deck. - 10/3/2019										
107/1:Steel Opn Girder/Beam	ft	587	50	294	50	293	0	0	0	0
1000/1:Corrosion	ft	293	0	0	100	293	0	0	0	0
Notes:Paint peeled to base metal-rust evident-50% of surface area. - 10/3/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	50	500	50	499	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	50	500	50	499	0	0
Notes:Paint system has limited effectiveness over 50% of area and no longer effective over the other 50% - 10/3/2019										
152/1:Steel Floor Beam	ft	30	0	0	100	30	0	0	0	0
1000/1:Corrosion	ft	30	0	0	100	30	0	0	0	0
Notes:Floor beams are corroded - 10/3/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Paint system not effective - 10/3/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Paint system not effective - 10/3/2019										
215/3:Re Conc Abutment	ft	59	85	50	15	9	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes:Spalls on both abutments below Beam 14. - 10/3/2019										
1130/3:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
Notes:Minor abutment cracking - 10/3/2019										
231/1:Steel Pier Cap	ft	60	0	0	100	60	0	0	0	0
1000/1:Corrosion	ft	60	0	0	100	60	0	0	0	0
Notes:Cap is corroded - 10/3/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Paint system not effective - 10/3/2019										
330/1:Metal Bridge Railing	ft	85	100	85	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Paint system not effective - 10/3/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Paint system not effective - 10/3/2019										
331/1:Re Conc Bridge Railing	ft	85	0	0	98	83	2	2	0	0
1130/1:Cracking (RC and Other)	ft	85	0	0	98	83	2	2	0	0
Notes:Cracking throughout rail, NW end post is missing - 10/3/2019										
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0

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Structure Number: 09-133-26.1

6000/3:Scour	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Double B&A end markers at approach corners. - 10/3/2019

Alert Code 1: Paint peeled to base metal - rust evident - 50% of surface area. Deck has moderate spalling and a large crack in the NB lane over the south abutment. Curb at NW corner of structure is damaged. NW concrete end post is missing. Beam 14 beam seats on both abutments have minor spalls. - 10/3/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-133-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	MAPLETON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 14	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 3 SOUTH MAPLETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 60.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 01' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	650088.3 5188519.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2012 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	October 28, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	03/03/2013
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch, Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 10 X 9 RCB		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 09-133-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	70	97	68	3	2	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:8"x16" spall in E box @ box joint - 10/28/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Various superficial spalls in walls and floor, some have been repaired. 8"x16" spall in E box @ box joint #10. Construction form still remaining in the box. - 10/28/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-133-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Applicable	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	MAPLETON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 14	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 4 SOUTH MAPLETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 01' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	650123.2 5186903.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 25 45 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 41 75 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	9 Above Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	December 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	23.33 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
Double 10 x 9 Precast RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-133-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	144	100	144	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	8	100	8	0	0	0	0	0	0

Remarks: _

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-134-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	RAYMOND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RAYMOND COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 3 NORTH MAPLETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 59' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	653095.5 5200659.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 40 72 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 43 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1989 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	60 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	1 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 21, 2019
32 Approach Roadway Width	25 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	31.8 Ft.	Other Special	N
48 Length of Max Span	59 Ft.	218 Channel Profile	1 48 05/30/2017
49 Structure Length	62.99 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	03/07/2018
51 Bridge Rdwy Width - Curb to Curb	31.8 Ft.	213 Federal Aid Project Number	CB 8916-1301
52 Deck Width	34.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-134-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	505	100	505	0	0	0	0	0	0
1110/1:Cracking (PSC)	ft	63	100	63	0	0	0	0	0	0
Notes:Deck grout coming out allowing water intrusion between girders 3&4. - 8/21/2019										
215/2:Re Conc Abutment	ft	69	94	65	6	4	0	0	0	0
1130/2:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:South abutment has cracks with efflorescence. NE wing cracked at abut. - 8/21/2019										
331/1:Re Conc Bridge Railing	ft	125	74	93	26	32	0	0	0	0
1130/1:Cracking (RC and Other)	ft	32	0	0	100	32	0	0	0	0
Notes:Concrete Bridge Railing has minor cracking throughout the length of the concrete railing. - 8/21/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B&A end markers on all corners. Channel has heavy veg. - 8/21/2019**Alert Code 1:** Deck grout coming out allowing water intrusion between girders 3&4. South abutment has cracks with efflorescence. NE wing cracked at abut. - 8/21/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-135-08.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	GARDNER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00945 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 23	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF GARDNER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	14.997	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 08' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 57' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	654432.4 5222421.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1937 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	260 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	35.8 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevoid, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 8X5X50' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-135-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	151	64	96	36	55	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:Spalling on ceiling of center box - 9/23/2019										
1120/3:Efflorescence/Rust Staining	ft	12	0	0	100	12	0	0	0	0
Notes:Cracking with efflorescence on box walls - 9/23/2019										
1130/3:Cracking (RC and Other)	ft	40	0	0	100	40	0	0	0	0
Notes:Cracks counted in concrete box walls - 9/23/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
1130/3:Cracking (RC and Other)	each	2	100	2	0	0	0	0	0	0
Notes:Cracking in west wing walls - 9/23/2019										

Remarks: CSP with flap gates on all corners. 6" x 12" yellow reflectors on all corners. Minor to moderate channel vegetation. 2' of scour west of box. - 9/23/2019

Alert Code 1: Cracking in exterior walls with efflorescence. Cracking in roof of all barrels. Center barrel roof has moderate cracking with efflorescence. Minor transverse cracks on roadway above the structure, Typical hairline cracks with efflorescence, West wingwalls are cracked, SW footing also. - 9/23/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-135-24.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	RAYMOND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00930 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN 14	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST OF MAPLETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	35.592	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 58' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	654469.0 5195110.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 32 58 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 19 35 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	32 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1947 106 Yr Reconstructed 1954	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	575 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	1 1 1 1
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 19, 2019
32 Approach Roadway Width	40 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.2 Ft.	Other Special	N
48 Length of Max Span	42 Ft.	218 Channel Profile	1 48 06/21/2017
49 Structure Length	43.96 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	03/07/2018
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-135-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,260	56	710	44	550	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	550	0	0	100	550	0	0	0	0
510/1:Wearing Surfaces	sq.ft	124	95	118	5	6	0	0	0	0
3210/1:Del/Spall/Patch/Pot(Wear Sur)	sq.ft	6	0	0	100	6	0	0	0	0
Notes:Patched areas are present at the edges of the deck across the driving lanes. Areas have been hot poured (patched). - 8/19/2019										
107/1:Steel Opn Girder/Beam	ft	177	0	0	100	177	0	0	0	0
1000/1:Corrosion	ft	177	0	0	100	177	0	0	0	0
Notes:Steel open girders are rusted with rust flaking present on the flanges. - 8/19/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Beams have rusted with no protective coating present - 8/19/2019										
110/1:Re Conc Opn Girder/Beam	ft	177	0	0	100	177	0	0	0	0
Notes:Concrete beams are showing coarse aggregate - 8/19/2019										
7000/1:Damage	ft	177	0	0	100	177	0	0	0	0
Notes:Concrete beams are showing signs of wear, with coarse aggregate exposed. All concrete is sound with no spalls or cracks - 8/19/2019										
215/3:Re Conc Abutment	ft	52	77	40	15	8	8	4	0	0
1080/3:Delamination/Spall/Patched Area	ft	4	0	0	0	0	100	4	0	0
Notes:Abutment 1 has two spalls that are deeper than 1in and have diameters greater than 6in. - 8/19/2019										
1130/3:Cracking (RC and Other)	ft	8	0	0	100	8	0	0	0	0
Notes:Abutments have unsealed moderate cracks - 8/19/2019										
330/1:Metal Bridge Railing	ft	89	89	79	11	10	0	0	0	0
7000/1:Damage	ft	10	0	0	100	10	0	0	0	0
Notes:North metal bridge rail has impact damage of 10 feet on the NW corner. - 8/19/2019										
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
Notes:Bridge railing is not showing any signs of rust, steel protective coating is still effective - 8/19/2019										
331/1:Re Conc Bridge Railing	ft	89	0	0	96	85	5	4	0	0
1090/1:Exposed Rebar	ft	4	0	0	0	0	100	4	0	0
Notes:Concrete bridge railing has cracking with exposed rebar in all four corners. - 8/19/2019										
1130/1:Cracking (RC and Other)	ft	12	0	0	100	12	0	0	0	0
Notes:Concrete Bridge railing has minor cracking present - 8/19/2019										
1190/1:Abrasion(PSC/RC)	ft	73	0	0	100	73	0	0	0	0
Notes:The concrete bridge railing is showing minor surface abrasion with coarse aggregate exposed. - 8/19/2019										
8398/1:Slope Protection	each	1	0	0	0	0	100	1	0	0
8401/3:Wings	each	4	25	1	75	3	0	0	0	0
Notes:Wings have moderate cracks present - 8/19/2019										
1130/3:Cracking (RC and Other)	each	3	0	0	100	3	0	0	0	0
Notes:Wings are showing moderate cracks - 8/19/2019										

Remarks: Double B&A end markers on approach corners. SW end terminal broken on guardrail. Old pile in channel. - 8/19/2019

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SEC 409

Structure Number: 09-135-24.0

Alert Code 1: Guardrail has minor collision damage. Moderate steel girder rust. Abutment spalling at concrete beam seats E#6. Hole behind SE wingwall. Minor-moderate channel scour. All backwalls at steel girders broken & spalling. Approaches settled. - 8/19/2019

Alert Code 2: Moderate spalling at beam seats 4&5 on W abutment with exposed rebar. Deck has water intrusion, major along steel girders. Moderate section loss of steel beam flanges. SW curb & bearing broken with exposed rebar. - 8/19/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-135-42.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	NORMANNA TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 SOUTH OF KINDRED	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 38' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 58' 07.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	655483.0 5166973.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 32 58 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 23 42 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	33 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1946 106 Yr Reconstructed	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 17, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	39 Ft.	218 Channel Profile	1 48 06/04/2019
49 Structure Length	119.09 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.3 Ft Lt-Side	212 Structure Load Rated	03/08/2018
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czeczok, Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-135-42.0

Structure Number: 09-135-42.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	2,895	0	0	100	2,895	0	0	0	0
1020/1:Connection	sq.ft	200	0	0	100	200	0	0	0	0
Notes:Underside of deck has minor separation allowing seepage & fungi growth. - 12/17/2019										
1140/1:Decay/Section Loss	sq.ft	2,695	0	0	100	2,695	0	0	0	0
Notes:Underside of deck has minor separation allowing seepage & fungi growth. - 12/17/2019										
510/1:Wearing Surfaces	sq.ft	2,895	100	2,895	0	0	0	0	0	0
Notes:HBP overlay placed in 2017. - 12/17/2019										
156/1:Timber Floor Beam	ft	72	0	0	94	68	0	0	6	4
1140/1:Decay/Section Loss	ft	64	0	0	94	60	0	0	6	4
Notes:Varying degrees of decay due to deck seepage. East end of south floorbeam is split, and lower portion of last 4' has broken off - 12/17/2019										
1170/1:Split/Delamination (Timber)	ft	8	0	0	100	8	0	0	0	0
Notes:East end of south floorbeam is split, and lower portion of last 4' has broken off - 12/17/2019										
206/3:Timber Column	each	22	0	0	86	19	14	3	0	0
1170/3:Split/Delamination (Timber)	each	22	0	0	86	19	14	3	0	0
Notes:All columns are split. - 12/17/2019										
216/2:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/2:Check/Shake	ft	24	0	0	100	24	0	0	0	0
Notes:Minor weather checking of timber. - 12/17/2019										
4000/2:Settlement	ft	25	0	0	100	25	0	0	0	0
Notes:Minor abutment cap rotation. - 12/17/2019										
225/3:Steel Pile	(EA)	8	0	0	100	8	0	0	0	0
Notes:Added in 2015. - 12/17/2019										
1000/3:Corrosion	(EA)	8	0	0	100	8	0	0	0	0
Notes:Freckle rust showing throughout. - 12/17/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Freckle rust showing throughout. - 12/17/2019										
231/1:Steel Pier Cap	ft	62	0	0	100	62	0	0	0	0
Notes:Added in 2015. - 12/17/2019										
1000/1:Corrosion	ft	62	0	0	100	62	0	0	0	0
Notes:Freckle rust showing throughout. - 12/17/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Freckle rust showing throughout. - 12/17/2019										
235/2:Timber Pier Cap	ft	95	0	0	67	64	33	31	0	0
1140/2:Decay/Section Loss	ft	6	0	0	0	0	100	6	0	0
Notes:Lower timber of south cap is hollow near the east end. - 12/17/2019										
1150/2:Check/Shake	ft	57	0	0	56	32	44	25	0	0
Notes:Abutment caps are split and have moderate checks. - 12/17/2019										

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1900/2:Distortion	ft	32	0	0	100	32	0	0	0	0
Notes:Minor abutment cap rotation. - 12/17/2019										
332/1:Timb Bridge Railing	ft	220	0	0	89	195	11	25	0	0
1020/1:Connection	ft	60	0	0	100	60	0	0	0	0
Notes:Varying degrees of connection failure on timber curb & railing. - 12/17/2019										
1140/1:Decay/Section Loss	ft	160	0	0	84	135	16	25	0	0
Notes:Railing sections have varying degrees of decay throughout structure. - 12/17/2019										
8398/2:Slope Protection	each	1	0	0	100	1	0	0	0	0
6000/2:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Moderate erosion at NE and SW quads: 12/17/19: unable to verify due to snow and ice cover. - 12/17/2019										
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
Notes:10/17/2019 -unable to access due to high water - 12/17/2019										
1140/2:Decay/Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:SW wingwall pile is hollow. - 12/17/2019										

Remarks: Varying degrees of decay in railing, rail posts & wingwall piling. Banks are sliding. Flood debris removed in 2015. 1/25/2016 - New H-Pile, steel and timber caps, and diagonal bracing at both piers. 10/17/2019 -unable to access due to high water and fast flowing currents, able to complete 12/17/19. - 12/17/2019

Alert Code 1: 1/2015 - Minor abutment cap rotation. Abutment caps are cracked and have moderate checks. Moderate erosion at NE and SW quads. SW wingwall pile is hollow. - 12/17/2019

Alert Code 2: 6' of lower timber of south abutment cap is decayed and hollow near the east end. - 12/17/2019

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Structure Number: 09-136-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	69.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	BERLIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 2	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST OF HARWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 58' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 56' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	656311.9 5204694.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 29 53 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1972 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	25.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	34 Ft.	Other Special	N
49 Structure Length	71.85 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/08/2018
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-136-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
16/1:Re Conc Top Flange	sq.ft	1,724	0	0	100	1,724	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	1,724	0	0	100	1,724	0	0	0	0
Notes:The concrete top flange has minor wear due to overburden abrasion - 10/16/2019										
110/1:Re Conc Opn Girder/Beam	ft	577	83	479	16	93	1	5	0	0
1080/1:Delamination/Spall/Patched Area	ft	26	0	0	81	21	19	5	0	0
Notes:The bottom of the beams have minor spalls and 5 spalls with rebar showing - 10/16/2019										
1130/1:Cracking (RC and Other)	ft	72	0	0	100	72	0	0	0	0
Notes:Girders in east span are cracked - 10/16/2019										
206/3:Timber Column	each	19	0	0	63	12	37	7	0	0
1170/3:Split/Delamination (Timber)	each	19	0	0	63	12	37	7	0	0
Notes:Timber columns are showing delamination piles 1,6, 7 on Pier 2, and pile 1, and 6 on both abutments are CS3 - 10/16/2019										
216/2:Timber Abutment	ft	56	0	0	100	56	0	0	0	0
Notes:There is some minor distortion on both abutment - 10/16/2019										
1900/2:Distortion	ft	56	0	0	100	56	0	0	0	0
Notes:minor distortion on both abutments was unable to measure due to high water - 10/16/2019										
235/1:Timber Pier Cap	ft	75	0	0	100	75	0	0	0	0
1140/1:Decay/Section Loss	ft	73	0	0	100	73	0	0	0	0
Notes:All Timber caps have decay but less than 10% of the member is affected. - 10/16/2019										
1170/1:Split/Delamination (Timber)	ft	2	0	0	100	2	0	0	0	0
Notes:SW cap has a 2 foot section that is split and crushed. - 10/16/2019										
330/1:Metal Bridge Railing	ft	144	81	116	19	28	0	0	0	0
1000/1:Corrosion	ft	144	81	116	19	28	0	0	0	0
Notes:Metal Bridge rail has minor corrosion on 20% of the bridge rail - 10/16/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	100	999	0	0	0	0
Notes:The protective coating is substantially effective as the primer coat has 80 % remaining - 10/16/2019										
331/2:Re Conc Bridge Railing	ft	144	100	144	0	0	0	0	0	0
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
Notes:High Water unable to see - 10/16/2019										
2210/3:Movement	each	1	0	0	100	1	0	0	0	0
8401/2:Wings	each	4	0	0	0	0	100	4	0	0
1900/2:Distortion	each	4	0	0	0	0	100	4	0	0
Notes:All wings are showing distortions - 10/16/2019										

Remarks: 6"X12" yellow reflector on NW corner. Moderate channel vegetation. Horizontal curves both directions. Signed curve & 30 mph, west only. Pipe with concrete headwall in SW embankment. - 10/16/2019

Alert Code 1: Span 1 shifting, measurements taken at curb: ??? N-2 1/4", S-3/4". Measured 07,09&11 with no change. 10/13@37 N-2", S-1". 10/15 @40 N-2", S-3/8". Girders 1-8 E span cracked. Drift pin damage at W abut cap & girders 1&2, E#7&8. Minor erosion NW corner. NE wing damaged. SW pier brace broken. - 10/16/2019

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Alert Code 2: Girders 4, 5, 6, & 7, in W span have spalled concrete & exposed rebar. 1 1/4" gap b/w girders 7&8 in W span due to no ties. West pile 1 & 6 split, all but #2 delaminated. Pier pile 1 & 7 split, all delaminated. East pile all delaminated but #4. All caps cracked, some crushing, discoloration & minor rotation NW, NE & SE. SW cap has moderate section loss. - 10/16/2019

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SEC 409

Structure Number: 09-136-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	54.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	RAYMOND TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN 2	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH 3 WEST HARWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 57' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	655328.0 5203225.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 25 45 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 11 21 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1939 106 Yr Reconstructed	1953	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	4 Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	140 30 Year of ADT	2019	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	37 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	212 Structure Load Rated	08/22/2016
52 Deck Width	24.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-136-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	958	0	0	100	955	0	3	0	0
1130/1:Cracking (RC and Other)	sq.ft	480	0	0	99	477	1	3	0	0
Notes:Minor soffit efflorescence present, Moderate cracking throughout deck, wide crack on the west end of deck 3 feet long, - 10/7/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	478	0	0	100	478	0	0	0	0
Notes:Wear showing exposed aggregate, but aggregate remains secure throughout deck - 10/7/2019										
107/1:Steel Opn Girder/Beam	ft	200	0	0	100	200	0	0	0	0
1000/1:Corrosion	ft	200	0	0	100	200	0	0	0	0
Notes:Freckled rust is present as paint is fading and has limited effectiveness. - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
Notes:There is some paint present but in limited in effectiveness, steel girders are rusting. - 10/7/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
215/3:Re Conc Abutment	ft	79	76	60	11	9	13	10	0	0
1080/3:Delamination/Spall/Patched Area	ft	10	0	0	0	0	100	10	0	0
Notes:SW & NE bearings & backwalls broken & spalled. - 10/7/2019										
1130/3:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes:Minor cracking & spalling in abuts. - 10/7/2019										
330/1:Metal Bridge Railing	ft	79	0	0	90	71	10	8	0	0
1000/1:Corrosion	ft	71	0	0	100	71	0	0	0	0
Notes:Metal bridge rail has corrosion, but no section loss visible - 10/7/2019										
7000/1:Damage	ft	8	0	0	0	0	100	8	0	0
Notes:Railings have damage on the SE end - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Limited effectiveness as metal railing is rusted. - 10/7/2019										
331/2:Re Conc Bridge Railing	ft	79	0	0	100	79	0	0	0	0
1190/2:Abrasion(PSC/RC)	ft	79	0	0	100	79	0	0	0	0
Notes:Concrete bridge railing has abrasion with exposed aggregate, aggregate is secure with no pop outs - 10/7/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	50	2	50	2	0	0	0	0
Notes:The wings are crack at joint connecting to abutment - 10/7/2019										
1130/2:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
Notes:NE and SW wings are cracked vertically along the abutment joints. Suggests movement or settlement of the wings - 10/7/2019										

Remarks: No bridge markers. Yellow RPMs on rail. Large pipe with concrete headwalls on NW & SW slope, timber headwalls NE & SE. Old timber pile in channel. - 10/7/2019

Alert Code 1: Railings have collision damage. Minor cracking & spalling in abuts. Minor soffit efflorescence. - 10/7/2019

Alert Code 2: SW & NE bearings & backwalls broken & spalled. - 10/7/2019

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Structure Number: 09-136-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	70.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	RAYMOND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 2 NORTH MAPLETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 40.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 56' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	656344.2 5199173.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 13 23 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 9 16 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	13 Tons
Age and Service		Appraisal	
27 Yr Built	1943 106 Yr Reconstructed	2010	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	2019	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	December 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	107.94 Ft.	218 Channel Profile	1 48 05/13/2019
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	212 Structure Load Rated	03/08/2018
52 Deck Width	24.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch, Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-136-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	2,594	70	1,804	31	790	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	20	0	0	100	20	0	0	0	0
Notes:Bridge Deck has timber planks with minor section loss. 20 areas of 1 foot sections throughout deck. - 12/18/2019										
1150/1:Check/Shake	sq.ft	120	0	0	100	120	0	0	0	0
Notes:The Timber Deck has planks with checks of 5% penetrations through out the deck - 12/18/2019										
1180/1:Abrasion	sq.ft	650	0	0	100	650	0	0	0	0
Notes:The Timber deck is showing signs of wear in the wheel paths approximately 25% of the deck - 12/18/2019										
111/1:Timber Open Girder	ft	1,512	53	808	46	689	1	15	0	0
1020/1:Connection	ft	108	0	0	100	108	0	0	0	0
Notes:West girders 13 & 14 at south pier misaligned. North span diaphragms starting to fall out. - 12/18/2019										
1150/1:Check/Shake	ft	525	0	0	100	525	0	0	0	0
Notes:Minor weather checking throughout - 12/18/2019										
1170/1:Split/Delamination (Timber)	ft	71	0	0	79	56	21	15	0	0
Notes:South end of girders 3-5 and 8 and ends of girders over the south pier are split. South 15' of west fascia girder is split throughout, approx. 4" up from the bottom. - 12/18/2019										
206/3:Timber Column	each	18	0	0	83	15	0	0	17	3
1140/3:Decay/Section Loss	each	1	0	0	0	0	0	0	100	1
Notes:Upper extension of west pile at south pier has split and portions are missing providing minimal bearing capacity. - 12/18/2019										
1170/3:Split/Delamination (Timber)	each	17	0	0	88	15	0	0	12	2
Notes:West 2 pile of north pier are split in half due to impact damage and are not functional. Most other pile are split. - 12/18/2019										
215/3:Re Conc Abutment	ft	49	80	39	20	10	0	0	0	0
1130/3:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:Minor abutment cracking. - 12/18/2019										
235/1:Timber Pier Cap	ft	95	0	0	100	95	0	0	0	0
Notes:10/15 not inspected High Water - 12/18/2019										
1150/1:Check/Shake	ft	95	0	0	100	95	0	0	0	0
Notes:Minor weathering of timber. - 12/18/2019										
332/2:Timb Bridge Railing	ft	216	82	176	0	0	19	40	0	0
1170/2:Split/Delamination (Timber)	ft	22	0	0	0	0	100	22	0	0
Notes:The Timber Bridge Railing has 13' of split/ delamination on the SE rail, and 9 post that have delamination - 12/18/2019										
7000/2:Damage	ft	18	0	0	0	0	100	18	0	0
Notes:The Timber Bridge Railing has 18 feet of damage on the NE, NW, and SW corners of the bride - 12/18/2019										
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Erosion behind SW wing. - 12/18/2019										

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SEC 409

Structure Number: 09-136-22.0

Remarks: Structure has been raised to increase Item No. 71, waterway. Yellow reflectors on all 4 corners. Signed for 25 mph both directions. Posted: 6 ton per axle, 13 ton gross. Signed at CR 20 also. Minor channel debris.
12-15-2010: New deck, curb, and girders-first 2 E & W sides in Span 2 & first 2 E side in Span 3. 2014- Pier piling repaired. 10/15 Structure has High water, water level is up to the timber beams 11-25-19 water is abutment to abutment and unable to inspect underside of structure. South span has 2 diagonals, center has 1, north span has no diagonals. - 12/18/2019

Alert Code 1: West girders at south pier misaligned. North span diaphragms starting to fall out. Pier caps are cracked. - 12/18/2019

Alert Code 2: Most pile are cracked, south pier west pile is misaligned. South end of girders 3-5 and 8 are cracked. Ditches on south side have major erosion. - 12/18/2019

Alert Code 3: Upper extension of west pile at south pier has split and portions are missing providing minimal bearing capacity. - 12/18/2019

Critical Finding West 2 pile of north pier are split in half due to impact damage and are not functional. - 12/18/2019

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SEC 409

Structure Number: 09-136-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	66.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	RAYMOND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 14	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 2 NORTH MAPLETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 56' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	656356.3 5198035.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 20 37 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 11 20 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1957 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 08, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	45.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.0 Ft.	Other Special	N
48 Length of Max Span	46 Ft.	218 Channel Profile	1 48 06/21/2017
49 Structure Length	48.88 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	08/24/2016
51 Bridge Rdwy Width - Curb to Curb	22.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	23.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-136-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,130	0	0	98	1,107	2	23	0	0
1160/1:Crack (Timber)	sq.ft	23	0	0	0	0	100	23	0	0
Notes:The timber deck has some cracking present in the wheel paths. The timber members are worn and cracking. - 10/8/2019										
1180/1:Abrasion	sq.ft	1,107	0	0	100	1,107	0	0	0	0
Notes:Deck planks showing wear of about 1/2 inch in the wheel paths. The planks are 6 inches thick. - 10/8/2019										
107/1:Steel Opn Girder/Beam	ft	259	0	0	100	259	0	0	0	0
1000/1:Corrosion	ft	259	0	0	100	259	0	0	0	0
Notes:Varying degrees girder rust throughout structure. Outside girders have some remaining paint. - 10/8/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	20	200	80	799	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	20	200	80	799	0	0
Notes:Varying degrees girder rust throughout structure. Outside girders have some remaining paint. - 10/8/2019										
152/1:Steel Floor Beam	ft	66	0	0	100	66	0	0	0	0
1000/1:Corrosion	ft	66	0	0	100	66	0	0	0	0
Notes:Varying degrees of rust throughout structure. - 10/8/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Varying degrees of rust throughout structure. - 10/8/2019										
215/3:Re Conc Abutment	ft	72	88	63	13	9	0	0	0	0
1130/3:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes:All backwalls cracking & spalling. Gravel coming thru spalled concrete on south. Minor abut deterioration. Minor vertical cracks in the center of the abutments - 10/8/2019										
330/1:Metal Bridge Railing	ft	98	0	0	100	98	0	0	0	0
1000/1:Corrosion	ft	98	0	0	100	98	0	0	0	0
Notes:Freckle rust throughout posts. - 10/8/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	50	500	50	499	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	50	500	50	499	0	0
Notes:Freckle rust throughout posts. The east rail is showing less rust and more paint as the west rail has more rust than paint coverage. - 10/8/2019										
332/2:Timb Bridge Railing	ft	98	0	0	0	0	100	98	0	0
1180/2:Abrasion	ft	98	0	0	0	0	100	98	0	0
Notes:Timber rail has general age & weathering wear. - 10/8/2019										
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
1190/3:Abrasion(PSC/RC)	each	4	50	2	50	2	0	0	0	0
Notes:The SW and SE wings are showing some coarse aggregate from abrasion. No pop out are present and aggregate remains secure in concrete. - 10/8/2019										

Remarks: White PVC end markers all corners. - 10/8/2019

Alert Code 1: Varying degrees girder rust. All backwalls cracking & spalling. Gravel coming thru spalled concrete on south. Deck planks showing wear. Minor abut deterioration. - 10/8/2019

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Structure Number: 09-136-23.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	80.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	RAYMOND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 14	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 1 NORTH MAPLETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 57' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	654925.1 5196692.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 28 51 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 31 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1952 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 08, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	35 Ft.	218 Channel Profile	1 48 06/21/2017
49 Structure Length	73.16 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	03/08/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 09-136-23.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
16/1:Re Conc Top Flange	sq.ft	1,756	77	1,356	23	400	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	400	0	0	100	400	0	0	0	0
Notes:Minor deck abrasion/wear - 10/8/2019										
110/1:Re Conc Opn Girder/Beam	ft	584	100	582	0	2	0	0	0	0
Notes:Deck has on staining girders. - 10/8/2019										
7000/1:Damage	ft	2	0	0	100	2	0	0	0	0
Notes:Tie bolts missing b/w girder 1&2 & 6&7 on east side. - 10/8/2019										
206/3:Timber Column	each	18	0	0	100	18	0	0	0	0
1150/3:Check/Shake	each	18	0	0	100	18	0	0	0	0
Notes:Timber pile are all in a condition state 2 for check shake - 10/8/2019										
6000/3:Scour	each	4	100	4	0	0	0	0	0	0
Notes:Minor scour under structure. - 10/8/2019										
216/2:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	79	95	75	5	4	0	0	0	0
1140/1:Decay/Section Loss	ft	40	90	36	10	4	0	0	0	0
Notes:The timber caps have some minor decay at the ends of the cap due to leaking between the beams. - 10/8/2019										
330/1:Metal Bridge Railing	ft	148	0	0	95	140	0	0	5	8
1000/1:Corrosion	ft	140	0	0	100	140	0	0	0	0
Notes:Light to moderate corrosion throughout railing. - 10/8/2019										
7000/1:Damage	ft	8	0	0	0	0	0	0	100	8
Notes:8' NE corner of railing is missing. - 10/8/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Light to moderate corrosion throughout railing. Paint throughout is over 50% missing. - 10/8/2019										
331/2:Re Conc Bridge Railing	ft	148	98	145	2	3	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:Spalls on the curb. - 10/8/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Single B&W end marker on SW corner only. Sharp horizontal curves both directions. Old pile in channel. - 10/8/2019

Alert Code 1: 8' NE corner of railing is missing. Most pile are delaminated. Deck drains staining girders. Ties missing b/w girder 1&2 & 6&7 on east side. Minor deck abrasion. Water seepage b/w girders. Scour under structure. - 10/8/2019

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SEC 409

Structure Number: 09-136-37.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	NORMANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 5 NORTH KINDRED	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 42' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 56' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	656900.2 5175484.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	4 Low Slump Concrete	64 Oper. Rating	HS 48 87 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 23 43 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2014 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	December 17, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	56 Ft.	Other Special	N
49 Structure Length	169.00 Ft.	218 Channel Profile	1 48 06/04/2019
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/09/2014
	28.0 Ft.	213 Federal Aid Project Number	CB1302
52 Deck Width	30.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czeczok, Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-136-37.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	5,070	89	4,502	11	568	0	0	0	0
Notes:Element has cracking on underside of deck. - 12/17/2019										
1120/3:Efflorescence/Rust Staining	sq.ft	498	0	0	100	498	0	0	0	0
Notes:Cracking and efflorescence showing on deck underside. - 12/17/2019										
1130/3:Cracking (RC and Other)	sq.ft	70	0	0	100	70	0	0	0	0
Notes:Cracking and efflorescence showing on deck underside. - 12/17/2019										
520/3:Conc Re Prot Sys	sq.ft	5,070	100	5,070	0	0	0	0	0	0
Notes:Epoxy coated deck rebar. - 12/17/2019										
104/1:Pre Clsd Box Girder	ft	676	100	676	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	60	0	0	100	60	0	0	0	0
6000/1:Scour	ft	60	0	0	100	60	0	0	0	0
Notes:Bank erosion around both pier walls. - 12/17/2019										
215/1:Re Conc Abutment	ft	61	100	61	0	0	0	0	0	0
310/1:Elastomeric Bearing	each	16	100	16	0	0	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
2210/1:Movement	each	2	0	0	100	2	0	0	0	0
Notes:Both banks are eroding upstream of the slope protection. - 12/17/2019										

Remarks: Beam #2 span 1 east side, Beam 3 west side have wood forms remaining. Unable to see - High Water
10/30/2019 Delay inspection.12/17/19:completed inspection. - 12/17/2019

Alert Code 1: Cracking and efflorescence showing on deck underside. Deck delamination in 2 bays center span at north pier & 1 bay in south span near south pier. Large silt accumulations in outer spans. - 12/17/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-136-39.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	NORMANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 2 NORTH OF KINDRED	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 40' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 57' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	656584.7 5171753.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 49 89 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	December 17, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	50.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	69 Ft.	Other Special	N
49 Structure Length	169.95 Ft.	218 Channel Profile	1 48 06/04/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/08/2018
	27.9 Ft.	213 Federal Aid Project Number	BRO-9(9)
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czeczok, Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 09-136-39.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	5,102	100	5,102	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	850	100	850	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	59	75	44	25	15	0	0	0	0
1130/3:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
Notes:Minor, random cracks. - 12/17/2019										
6000/3:Scour	ft	10	0	0	100	10	0	0	0	0
Notes:Minor erosion behind piers. Embankment is sliding - NE & SW quadrants. Embankment eroding from deck drains. 20' x 20' hole in SW embankment approx 50' south of the structure. - 12/17/2019										
215/2:Re Conc Abutment	ft	59	98	58	2	1	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:12/17/19: Unable to find spall, possibly beneath silt accumulation against abutments. - 12/17/2019										
234/1:Re Conc Pier Cap	ft	59	90	53	10	6	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:South end of west pier cap has a spall. - 12/17/2019										
1130/1:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
Notes:North end of the west pier cap has cracks. - 12/17/2019										
330/1:Metal Bridge Railing	ft	341	100	341	0	0	0	0	0	0
1000/1:Corrosion	ft	0	0	0	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	80	799	20	200	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	80	799	20	200	0	0	0	0
Notes:Rail posts have some peeling paint - 12/17/2019										
331/1:Re Conc Bridge Railing	ft	341	87	295	14	46	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Impact damage to east end of north rail - 12/17/2019										
1130/1:Cracking (RC and Other)	ft	45	0	0	100	45	0	0	0	0
Notes:Minor random cracks throughout curb. - 12/17/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Horiz. curves both directions. Signed 'curve' & 25 mph both directions. 10/22/19: Unable to inspect superstructure and substructure due to high water. 12/17/19: completed inspection. - 12/17/2019

Alert Code 1: Minor, random deck cracking with some soffit efflorescence visible in Span 3. End west pier cap N. side has cracks. North beam, center span at west pier as a lot of moisture coming out of the weep hole. Minor erosion behind piers. Embankment is sliding - NE & SW quadrants. Embankment eroding from deck drains. 20' x 20' hole in SW embankment approx 50' south of the structure. 12/19: Large accumulations of silt in outer spans. - 12/17/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-137-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	82.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HARWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 12	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 1 NORTH OF HARWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 55' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	657991.0 5206779.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 28 50 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 30 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1961 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	November 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.9 Ft.	Underwater	N
48 Length of Max Span	54 Ft.	Other Special	N
49 Structure Length	110.89 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	1.6 Ft Rt-Side	Chaining Date	None
	1.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	212 Structure Load Rated	03/08/2018
52 Deck Width	28.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevold, Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-137-17.0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-137-17.0

Remarks: Double B&A end markers on approach corners. Erosion around pipe in SE, SW & NE corners. Mod. channel sloughing on both sides of structure. Steel pile with ice nose added next to #1 timber that is shredded. Joint opening over pier measured on curbs: 3/4"-2007, 11/09@43 W-1 1/4", E 1 1/2". 11/11 no change. 10/13@39 W-1 1/2", E-1 3/4". 10/15@40D W 1 3/8" E 1 5/8". - 11/13/2019

Alert Code 1: Portion of pier brace is missing. Pier pile 2 is not effective due to splits and a steel pile has been installed next to it. Piles 1 & 4 in north abutment have wide splits. Piles 4 & 6 in south abutment have minor splits. Beam 6 soffit has minor scaling in north span. Seepage between girders. CSP retaining wall on N slope is corroded & tipped over allowing scour. Sheet pile & timber retaining wall on S slope under bridge, timber is rotting & missing. Joint over pier is open. Wingwall pile are rotted. W girder has superficial hairline crack at north rail post connection with efflorescence. Pier cap is fully split at south end. - 11/13/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-137-18.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	39.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HARWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 2	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST OF HARWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 58' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 55' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	658047.3 5204744.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 20 37 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 9 18 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	5 Tons
Age and Service		Appraisal	
27 Yr Built	1939 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 14, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	46 Ft.	218 Channel Profile	1 48 05/22/2019
49 Structure Length	50.85 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/24/2016
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-137-18.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,227	80	987	20	240	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	240	0	0	100	240	0	0	0	0
Notes:Random deck cracking - 11/14/2019										
107/1:Steel Opn Girder/Beam	ft	256	0	0	100	256	0	0	0	0
1000/1:Corrosion	ft	256	0	0	100	256	0	0	0	0
Notes:Minor corrosion of all girders - 11/14/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	40	40	40	40	20	20
Notes:Varying degrees of paint effectiveness - 11/14/2019										
215/3:Re Conc Abutment	ft	62	0	0	44	27	7	4	50	31
1080/3:Delamination/Spall/Patched Area	ft	8	0	0	75	6	25	2	0	0
Notes:Spalling in abutment beneath all beam seats. - 11/14/2019										
1130/3:Cracking (RC and Other)	ft	7	0	0	71	5	29	2	0	0
Notes:Cracking in both abutments. Wide cracks at each end of the north abutment. - 11/14/2019										
1190/3:Abrasion(PSC/RC)	ft	16	0	0	100	16	0	0	0	0
Notes:Concrete surface is worn - 11/14/2019										
4000/3:Settlement	ft	31	0	0	0	0	0	0	100	31
Notes:South abutment has settled. - 11/14/2019										
330/1:Metal Bridge Railing	ft	102	0	0	100	102	0	0	0	0
1000/1:Corrosion	ft	102	0	0	100	102	0	0	0	0
Notes:Minor corrosion of the rails - 11/14/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	50	500	40	400	10	99
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	50	500	40	400	10	99
Notes:Varying degrees of paint effectiveness - 11/14/2019										
331/2:Re Conc Bridge Railing	ft	102	92	94	8	8	0	0	0	0
1130/2:Cracking (RC and Other)	ft	8	0	0	100	8	0	0	0	0
Notes:Cracking in both curbs - 11/14/2019										
8401/2:Wings	each	4	50	2	0	0	50	2	0	0
4000/2:Settlement	each	2	0	0	0	0	100	2	0	0
Notes:SW and SE wingwalls have separated at construction joints, inner portions are settling with the abutment. - 11/14/2019										

Remarks: Culvert with flap gate in NW corner. Yellow end markers on all corners. SE corner of deck appeared to be a lowest corner with 4.5 ft depth hole. SE wingwall had 14-1/2" settlement & tilted out from original construction. SW wing wall had 2-1/2" settled & till in from original construction (See photo). Physical appearance , deck is 52.5 ft in lenght but (abutment to abutment is 46.0 ft) deck is longer than the opening (cap to cap). 11/14/2019: Structure posted for 2 tons per axle, 5 tons gross. Talked with Frank Podall-Cass County about the settlement of the south abutment, which is progressing. He stated they will continue to monitor, and this structure is scheduled to be replaced in 2020. - 11/14/2019

Alert Code 1: Diaphragms are cracked. Abutments tipping in, all girder braces (pile) on south & all but 1 on north broke off. Moderate backwall spalling with corroded rebar at deck ends. - 11/14/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-137-18.1

Alert Code 2: Large crack in south abutment. Aug 24 2018 , open 1 1/4" & shifted 1 1/4" with exposed rebar, 10/14 top 1", bot 3", 10/15 top 1", bot 3", shift 2 1/2". Spalling with corroded rebar at all beam seats, backwalls broken out. Measurements are inches in 2': 10/15: NW-1 1/8, NE 2 1/8, SW 7/8, SE 3/8 10/14: NW-1, NE-2, SW-3/4, SE-1/2 10/13: NW-3/4, NE-1 3/4, SW-3/4, SE-1/2 11/11: NW-1, NE-1 3/4, SW-1, SE-1/2 11/09: NW-3/4, NE-2, SW-3/4, SE-1/2 09/07: NW-2, NE-1/2, South-3/4 Measured From Girders : South abutment SE 3/4" x 2ft (tilted in; SW 1/2" x 2ft tilted out) North abutment NE 1-0" x 2ft ; NW 5/8" x 2 ft . ????: NW-3/4, NE-1 1/4 - 11/14/2019

Alert Code 3: South abutment has settled, 11/2019 measurement of vertical construction joint of SE wingwall = 16-1/2". - 11/14/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-137-34.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	WARREN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH 1 WEST OF HORACE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 44' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 55' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	658340.5 5179067.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	99 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	59 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1983 106 Yr Reconstructed	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	140 30 Year of ADT	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	4 Stable, needs action
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 17, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	69 Ft.	218 Channel Profile	1 48 06/12/2019
49 Structure Length	168.96 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	12/11/1996
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	BRO-9(8)
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czeczok, Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 09-137-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	5,048	97	4,898	3	150	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	150	0	0	100	150	0	0	0	0
Notes:Minor hairline cracks on bridge deck. - 12/17/2019										
109/1:Pre Opn Conc Girder/Beam	ft	846	100	846	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	59	51	30	49	29	0	0	0	0
1130/3:Cracking (RC and Other)	ft	10	100	10	0	0	0	0	0	0
Notes:Minor cracking on diaphragm on pier 3 E side, pier 2 W side. N end of pier 2 & 3 have minor cracking. - 12/17/2019										
6000/3:Scour	ft	29	0	0	100	29	0	0	0	0
Notes:Large silt accumulations and erosion around west pier and in west span. - 12/17/2019										
215/2:Re Conc Abutment	ft	59	97	57	3	2	0	0	0	0
1130/2:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
Notes:Minor cracks in abutments. - 12/17/2019										
234/1:Re Conc Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	338	80	270	20	68	0	0	0	0
1000/1:Corrosion	ft	68	0	0	100	68	0	0	0	0
Notes:Rail posts have minor corrosion - 12/17/2019										
515/1:Steel Protective Coating	sq.ft	999	80	799	0	0	20	200	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	200	0	0	0	0	100	200	0	0
Notes:Rail posts are corroded with paint loss - 12/17/2019										
331/1:Re Conc Bridge Railing	ft	338	89	300	11	38	0	0	0	0
1130/1:Cracking (RC and Other)	ft	38	0	0	100	38	0	0	0	0
Notes:Hairline cracks in the rail - 12/17/2019										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
2210/3:Movement	each	1	0	0	100	1	0	0	0	0
Notes:Moderate embankment erosion SE, minor SW & NW. Slope protection buried in silt. - 12/17/2019										
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Moderate embankment erosion SE, minor SW & NW. Slope protection buried in silt. - 12/17/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Power cable along rail north half of bridge USG5, cable runs on north side of pier 2. 10/22/19:Unable to inspect superstructure and substructure due to high water/swift current. 12/17/19: Completed inspection. - 12/17/2019

Alert Code 1: Large silt accumulations in outer spans, which is eroding, and moderate embankment erosion SE, minor SW & NW. Minor hairline cracks on bridge deck. Minor cracking on diaphragm on pier 3 E side, pier 2 W side. N end of pier 2 & 3 have minor cracking. - 12/17/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-137-36.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	WARREN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00950 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 3 SOUTH HORACE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	14.197	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 56' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	657080.2 5175802.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 51 93 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 31 56 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	8 Desirable Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	950 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	20.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	December 17, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	N
48 Length of Max Span	59 Ft.	Other Special	N
49 Structure Length	183.07 Ft.	218 Channel Profile	1 48 06/04/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	40.0 Ft.	212 Structure Load Rated	03/08/2018
52 Deck Width	42.7 Ft.	213 Federal Aid Project Number	CBRS-0950(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen, Finton, Kelsch, Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-137-36.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	7,782	99	7,682	1	100	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Minor random deck cracking-some soffit efflorescence visible. - 12/17/2019										
1130/1:Cracking (RC and Other)	sq.ft	300	100	300	0	0	0	0	0	0
Notes:Minor random deck cracking-some soffit efflorescence visible. - 12/17/2019										
104/1:Pre Clsd Box Girder	ft	915	100	915	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	85	0	0	100	85	0	0	0	0
6000/3:Scour	ft	85	0	0	100	85	0	0	0	0
Notes:Embankment erosion. Pier rip rap is washed away or buried in silt. Deck drains are causing moderate embankment erosion. - 12/17/2019										
215/2:Re Conc Abutment	ft	85	100	85	0	0	0	0	0	0
321/1:Re Conc Approach Slab	sq.ft	999	0	0	100	999	0	0	0	0
4000/1:Settlement	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Joint compound failing at bridge ends, joints are leaking. Approach slabs have settled & pulled away. - 12/17/2019										
331/1:Re Conc Bridge Railing	ft	367	100	367	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	67	100	67	0	0	0	0	0	0
Notes:Minor random cracks throughout barrier. - 12/17/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Structure has High Water limiting access underneath structure. No room to boat underneath- Delayed 10/22/2019 11-8-19 Unable to get under structure due to high water.12/17/19: Able to complete the inspection. - 12/17/2019

Alert Code 1: Minor random deck cracking-some soffit efflorescence visible. 11/10/2005 - Embankment erosion. Pier rip rap is washed away or buried in silt. Deck drains are causing moderate embankment erosion. Joint compound failing at bridge ends, joints are leaking. Approach slabs have settled & pulled away. Large silt accumulations in outer spans. - 12/17/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-137-40.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	NORMANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST OF KINDRED	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 39' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 56' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	657045.8 5169357.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 40 73 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1995 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	150 30 Year of ADT	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	December 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	66 Ft.	Other Special	N
49 Structure Length	204.07 Ft.	218 Channel Profile	1 48 06/04/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/08/2018
	29.9 Ft.	213 Federal Aid Project Number	BRO-9(16)
52 Deck Width	31.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-137-40.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	6,426	95	6,091	5	335	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	20	0	0	100	20	0	0	0	0
Notes:There are some minor spalls less then 1 foot on the bridge deck. - 12/13/2019										
1130/1:Cracking (RC and Other)	sq.ft	315	0	0	100	315	0	0	0	0
Notes:Minor random deck cracking, especially over span 2. - 12/13/2019										
104/1:Pre Clsd Box Girder	ft	817	99	809	1	8	0	0	0	0
Notes:6.0" hair line cracked at end beam / over pier # 2 & 3. - 12/13/2019										
210/3:Re Conc Pier Wall	ft	62	50	31	50	31	0	0	0	0
6000/3:Scour	ft	31	0	0	100	31	0	0	0	0
Notes:Rip rap has washed out. Large silt accumulation in Span 1. Moderate silt accumulation in Span 3. SW bank is sliding. 11/09/2005 - Slope protection has been washed away, buried, or is missing.10/17/2019 -unable to access due to high water - 12/13/2019										
215/2:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	407	100	407	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor channel debris. There is an area in span 2 where it appears deck forms moved. Horizontal curve west. Signed curve & slow westp - 12/13/2019

Alert Code 1: Minor random deck cracking, especially over span 2. Large silt accumulation in Span 1. Moderate silt accumulation in Span 3. SW bank is sliding. Slope protection has been washed away, buried, or is missing. Hairline cracks at the beam end over pier #2 & 3. (16 ea) - 12/13/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	65.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	NOBLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 31	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 2 SOUTH GRANDIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 12' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 53' 60.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	659032.1 5230541.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 21 38 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 10 18 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	20 Tons
Age and Service		Appraisal	
27 Yr Built	1959 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 19, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.3 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/21/2019
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/24/2016
51 Bridge Rdwy Width - Curb to Curb	24.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevold, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	807	100	807	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	154	0	0	100	154	0	0	0	0
1000/1:Corrosion	ft	154	0	0	100	154	0	0	0	0
Notes:Minor corrosion on girders. - 9/19/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	80	799	20	200	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	80	799	20	200	0	0
Notes:Paint protection has limited effectiveness - 9/19/2019										
206/2:Timber Column	each	12	0	0	33	4	42	5	25	3
1140/2:Decay/Section Loss	each	3	0	0	0	0	0	0	100	3
Notes:North pile 1,4&5 split and hollow - 9/19/2019										
1160/2:Crack (Timber)	each	4	0	0	100	4	0	0	0	0
Notes:Cracking in remaining pile - 9/19/2019										
1170/2:Split/Delamination (Timber)	each	5	0	0	0	0	100	5	0	0
Notes:South abutment pile split - 9/19/2019										
216/2:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Scour under structure - 9/19/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: PVC end markers on approach corners, bent over. No rail. Old pile in channel. Posted 9 ton per axle, 20 ton gross. Major erosion at pipes at all corners of structure. - 9/19/2019

Alert Code 1: Scour under structure. Bottom of both backwalls exposed & undermined. Scour at NE & SE. Backwall boards starting to sepearate. - 9/19/2019

Alert Code 2: South pile 1-5 split. N backwall tipping out. NW wingwall pile hollow. Both caps cracked NW & SW. - 9/19/2019

Alert Code 3: North pile 1,4&5 split and hollow. - 9/19/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HARWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 12	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 NORTH HARWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 59' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 54' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	659557.4 5206826.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	December 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	25.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	27.89 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch, Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
SINGLE, 27-11X15-10X90' SPPA		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/2:Steel Culvert	ft	89	78	69	23	20	0	0	0	0
1000/2:Corrosion	ft	9	0	0	100	9	0	0	0	0
Notes:Minor corrosion. - 12/18/2019										
1900/2:Distortion	ft	10	0	0	100	10	0	0	0	0
Notes:Minor distortion in top at center of structure. - 12/18/2019										
6000/2:Scour	ft	1	0	0	100	1	0	0	0	0
Notes:East end is undermined. - 12/18/2019										
515/2:Steel Protective Coating	sq.ft	100	90	90	10	10	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	90	90	10	10	0	0	0	0
Notes:Minor corrosion, coating is effective. - 12/18/2019										

Remarks: Yellow end markers all corners. Sharp hor. curves on both sides. Speed limit 40MPH & Road Narrows on both directions. High Water Structure submerged 10/15. 12/18/19:completed inspection. - 12/18/2019

Alert Code 1: Scour undermining east end, Minor distortion of culvert. - 12/18/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-18.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HARWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF HARWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 58' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 54' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	659503.5 5204766.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	0	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2013 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	September 26, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	05/13/2014
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 12 x 5 x 68' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-18.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	136	100	136	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B&A end markers on all corners.

Alert Code 1: Minor silt build up in east barrel. Minor seperation of barrels up to 1/2".

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-20.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	REED TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00949 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 SOUTH OF HARWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	22.795	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 54' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	659500.7 5202480.1	Condition	
98 Border Bridge	Unknown (P)	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	5	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 30
208 Dk Overburden	1	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1987	Appraisal	
106 Yr Reconstructed	-1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	1,510	72 App. Rdwy. Alignment	8 Equal Desirable Crit
30 Year of ADT	2019	36 Traffic Safety Features	1 1 1 1
109 Average Daily Truck Traffic	11.00	113 Scour Critical	5 Stable w/in footing
19 Bypass, Detour Length	2 Miles		
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 01, 2019
32 Approach Roadway Width	36 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	35.8 Ft.	Other Special	N
48 Length of Max Span	59 Ft.	218 Channel Profile	1 48
49 Structure Length	304.13 Ft.	Chaining Date	05/23/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	None
	0.0 Ft Lt-Side	212 Structure Load Rated	-1
51 Bridge Rdwy Width - Curb to Curb		213 Federal Aid Project Number	03/04/1996
	36.1 Ft.	214 Delayed Inspection	CBRS-0949(55)
52 Deck Width	38.4 Ft.	216 Inspector	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.		Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-138-20.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	11,647	100	11,647	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	1,519	100	1,519	0	0	0	0	0	0
210/2:Re Conc Pier Wall	ft	151	95	144	5	7	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	7	0	0	100	7	0	0	0	0
Notes:Spall on pier 3, beam seat 3 & 4. - 10/1/2019										
215/2:Re Conc Abutment	ft	75	92	69	8	6	0	0	0	0
1130/2:Cracking (RC and Other)	ft	6	0	0	100	6	0	0	0	0
Notes:Cracking with efflorescence in abutments - 10/1/2019										
321/2:Re Conc Approach Slab	sq.ft	999	100	999	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	607	88	536	12	71	0	0	0	0
1130/2:Cracking (RC and Other)	ft	71	0	0	100	71	0	0	0	0
Notes:Cracks counted in concrete bridge rail - 10/1/2019										
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: No signing. 5 1/2" conduit attached to outside of E barrier, conduit inside W barrier. Both pourable sealing joint have leakage. South abutment has seepage and efflorescence at beams & spall at beam seat # 1, barrier railing has hairline cracks & pop outs, Deck has minor abrasion & popping out. Spall on pier 3, beam seat 3 & 4. Spall near pier 4 on girder 1. Spalling on girder 3, span 2. N approach slab undermined. Pier cap 5 has spall & rebar exposed on soffit. Minor scour around piers 3&4. Piers tops tipped to N, measured in 2' at center on outsides
DATE : Oct 2007 @45 F Pier # 3 + 1/2" ; Pier # 4 = 0" Nov 2015 @xx Pier # 3 = 1/4" ; Pier # 4 = - 3/8" Oct 2017 @ 61 F Pier # 3 = 1/8" ; Pier # 4 = 3/4" - 10/1/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-21.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	87.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	REED TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00928 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 3 SOUTH OF HARWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	6.199	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 55' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	658291.3 5200097.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	4	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	66 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	31 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1957 106 Yr Reconstructed	1977	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	180 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	4 Stable, needs action
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 14, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	75 Ft.	Other Special	N
49 Structure Length	298.88 Ft.	218 Channel Profile	1 48 05/23/2019
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	212 Structure Load Rated	08/24/2016
52 Deck Width	26.6 Ft.	213 Federal Aid Project Number	ER-109(18)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevold, Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-21.0

Structure Number: 09-138-21.0

Element / Env. / Description		Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	7,954	0	0	100	7,954	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	10	0	0	100	10	0	0	0	0
Notes:Spalls on bridge deck - 11/14/2019										
1130/1:Cracking (RC and Other)	sq.ft	3,972	0	0	100	3,972	0	0	0	0
Notes:Concrete Bridge Deck has minor cracking spaced ever 4.5 feet throughout the deck - 11/14/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	3,972	0	0	100	3,972	0	0	0	0
Notes:Concrete Bridge Deck has abrasion showing coarse aggregate that is secure on 50% of the structure - 11/14/2019										
107/1:Steel Opn Girder/Beam	ft	1,198	83	994	15	180	2	24	0	0
1000/1:Corrosion	ft	204	0	0	88	180	12	24	0	0
Notes:Steel beams have minor rust on ends of the beams over Piers 3 & 4, and various areas throughout. Moderate corrosion with section loss on all girders over Pier 2. - 11/14/2019										
515/1:Steel Protective Coating	sq.ft	100	83	83	15	15	2	2	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	17	0	0	88	15	12	2	0	0
Notes:Varying degrees of paint effectiveness - 11/14/2019										
205/2:Re Conc Column	each	6	67	4	33	2	0	0	0	0
1190/2:Abrasion(PSC/RC)	each	2	0	0	100	2	0	0	0	0
Notes:11/19:Unable to verify abrasion, possibly below waterline. - 11/14/2019										
215/2:Re Conc Abutment	ft	52	94	49	6	3	0	0	0	0
1130/2:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
Notes:Several cracks in the east abutment - 11/14/2019										
220/3:Re Conc Pile Cap/Ftg	ft	52	0	0	94	49	6	3	0	0
Notes:unable to verify 11/19, below waterline. - 11/14/2019										
1090/3:Exposed Rebar	ft	3	0	0	0	0	100	3	0	0
Notes:North end of pier 3 footing cracked-unable to verify 11/19, possibly below waterline. - 11/14/2019										
1130/3:Cracking (RC and Other)	ft	49	0	0	100	49	0	0	0	0
Notes:Unable to verify 11/19, possibly below waterline. - 11/14/2019										
234/1:Re Conc Pier Cap	ft	79	96	76	4	3	0	0	0	0
1130/1:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
Notes:Several cracks in the caps - 11/14/2019										
302/1:Compressn Joint Seal	ft	79	0	0	100	79	0	0	0	0
2330/1:Seal Damage	ft	26	0	0	100	26	0	0	0	0
Notes:Compression seal has damage - 11/14/2019										
2350/1:Debris Impaction	ft	53	0	0	100	53	0	0	0	0
304/1:Open Expansion Joint	ft	52	81	42	19	10	0	0	0	0
7000/1:Damage	ft	10	0	0	100	10	0	0	0	0
Notes:open expansion joint as 10 feet of damage - 11/14/2019										
311/2:Moveable Bearing	each	16	0	0	75	12	25	4	0	0
1000/2:Corrosion	each	16	0	0	75	12	25	4	0	0
Notes:Bearings all have minor corrosion present, Pier 2 bearings have section loss - 11/14/2019										

Structure Number: 09-138-21.0

515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:limited effectiveness as paint is peeling and rust is prevalent - 11/14/2019										
313/2:Fixed Bearing	each	8	0	0	0	0	100	8	0	0
1000/2:Corrosion	each	8	0	0	0	0	100	8	0	0
Notes:All bearing have corrosion with section loss - 11/14/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
Notes:no paint on fixed bearings present - 11/14/2019										
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:no protection on fixed bearings - 11/14/2019										
330/1:Metal Bridge Railing	ft	591	100	591	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	591	70	415	30	176	0	0	0	0
1190/1:Abrasion(PSC/RC)	ft	176	0	0	100	176	0	0	0	0
Notes:Concrete Bridge Railing is showing coarse aggregate, but all aggregate is secure - 11/14/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Single B&A end markers on 4 corners. Yellow RPMs on rail. Signed curve & 25mph both directions. Steel pile in N channel, concrete S. Minor debris at pier 3. 10/2016 - New bridge rail retrofit & crash cushions installed at all 4 corners 11/2019-There does not appear to be lateral movement of the piers which is verified by sighting down the girders and ends of piers-all look parallel. Appears to be lateral movement of piers to N. Measured at metal rail, MM/YY@degrees: Pier#,N,S in inches: 10/15@41: 2N 3 1/8 2S 3 1/8 3N 2 3S 1/2 4N 3/8 4S 7/8 10/13@37: 2N 3 1/4 2S 2 1/4 3N 2 1/8 3S 1/4 4N 3/8 4S 3/4 ??/09@42: 2N 3 3/4 2S 2 5/8 3N 2 1/4 3S 3/8 4N 1/2 4S 3/4 ??/07@55: 2N 3 1/2 2S 2 5/8 3N x 3S x 4N 3/8 4S 3/4 ??/??@57: 2N 3 7/8 2S 3 7/8 3N 2 3/4 3S 2 1/4 4N 1/2 4S 3/8 ??/??@xx: 2N 4 1/8 4S 3 1/4 3N x 3S x 4N 1/2 4S 3/8 - 11/14/2019

Alert Code 1: Paint peeled to base metal-rust evident-25%, Minor sect loss at girder ends. Scour exposing pier 3&4 footings. W expansion joint failed, deck & conc spalled. Moderate deck cracking, spalls 2" deep w/rebar,3'x3' corner crack at SW pier 3. Corr. rebar in curb at drains, soffit delam. Settlement at piers 2N, 3S & 4N: 11/19-settlement not apparent, piers are low causing a rough ride. North end of pier 3 footing cracked. - 11/14/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-23.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	REED TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 1 WEST RIVERSIDE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 54' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	659249.7 5196787.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 44 80 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 46 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 14, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	49 Ft.	Other Special	N
49 Structure Length	150.92 Ft.	218 Channel Profile	1 48 05/13/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.9 Ft.	212 Structure Load Rated	03/08/2018
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch, Kirkevold
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-138-23.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	1,056	100	1,056	0	0	0	0	0	0
202/2:Steel Column	each	17	0	0	100	17	0	0	0	0
1000/2:Corrosion	each	17	0	0	100	17	0	0	0	0
Notes:Minor corrosion of all piling - 11/14/2019										
515/2:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Non-existent - 11/14/2019										
216/2:Timber Abutment	ft	59	49	29	51	30	0	0	0	0
6000/2:Scour	ft	30	0	0	100	30	0	0	0	0
Notes:Bottom of west backwall and fabric are exposed. - 11/14/2019										
231/1:Steel Pier Cap	ft	151	0	0	100	151	0	0	0	0
1000/1:Corrosion	ft	151	0	0	100	151	0	0	0	0
Notes:Minor corrosion of steel - 11/14/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Non-existent - 11/14/2019										
235/1:Timber Pier Cap	ft	151	50	76	47	71	3	4	0	0
1170/1:Split/Delamination (Timber)	ft	4	0	0	0	0	100	4	0	0
Notes:Ends of abutment caps are split - 11/14/2019										
1900/1:Distortion	ft	71	0	0	100	71	0	0	0	0
Notes:Both caps are rotated - 11/14/2019										
330/1:Metal Bridge Railing	ft	302	93	282	3	10	3	10	0	0
1000/1:Corrosion	ft	20	0	0	50	10	50	10	0	0
Notes:metal bridge rail has corrosion - 11/14/2019										
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	302	98	296	2	6	0	0	0	0
7000/1:Damage	ft	6	0	0	100	6	0	0	0	0
Notes:Concrete is damaged at the joints of the box beam on the west side of the structure see pictures Spalled - 11/14/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: B&A end markers all 4 corners. Signed for 25 mph both directions. Old wood & steel pile, caison, and east abutment in channel. Pier 2 rebuilt in 1997, bottom is in 1/4" in 2'. - 11/14/2019

Alert Code 1: Bottom of west backwall and fabric are exposed. Deck tie downs missing, exposed rebar, and spalling in west backwall between T-beams. Both timber caps rotated. Moderate erosion at Pier 2. West abut. is out of plumb 1" in 2' at north end and 1 3/4" in 2' at south end. w abut out of plumb north end 1" and south end 3/4"-11/09. 9/2013: North pile west abutment is leaning east 1-1/4" in 2' and south pile is leaning west 1/2" in 2'; 11/19: 1-1/4" east at north pile, and 1/4" west at south pile. Spalling and misalignment on driving surface at joint over Pier 2. - 11/14/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	BARNES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE DIVERSION	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 1 WEST WEST FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 55' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	658312.1 5190372.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 26, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	5.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	13 Ft.	Other Special	N
49 Structure Length	41.01 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok, Maneval
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 13X19X54' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	161	72	116	28	45	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
1130/3:Cracking (RC and Other)	ft	43	0	0	100	43	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor collision damage to south parapet of barrel no. 1. Minor scour north. Minor random cracking with efflorescence in roof of box. B & A end markers on all 4 corners and shoulder and wingwall delineation. Box showing minor rust staining. Moderate silting in channel and through boxes. Vertical cracking on all wingwalls. up to 0.006" cracking on boxes. S parapet has debris collision damage. NW & NE top corner of wingwalls have cracks.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-28.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	BARNES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE DIVERSION	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 1 WEST WEST FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 55' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	658178.6 5188755.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	170 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 26, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok, Maneval
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 12X18.5X50' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-28.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	151	83	125	17	26	0	0	0	0
1130/3:Cracking (RC and Other)	ft	26	0	0	100	26	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B&A end markers on all 4 corners plus shoulder and wingwall delineation. Minor random cracking throughout structure. Debris damage on both S head walls. Vertical cracking on all 4 wingwalls.

Alert Code 1: Efflorescence in box roof. Heavy silt accumulations at both ends of structure, and in all barrels.

Alert Code 2: Cracking in east barrel outside wall with water running through cracks and efflorescence visible.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	BARNES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE DIVERSION	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH 1 WEST WEST FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 55' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	658369.2 5187137.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	170 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	October 26, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok, Maneval
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 12X18X80' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	240	89	214	11	26	0	0	0	0
1130/3:Cracking (RC and Other)	ft	26	0	0	100	26	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B&A end markers on all four corners plus shoulder & wingwall delineation. NE & NW corners of parapets cracked and spalled. Minor vertical cracking in wingwalls. Heavy silt accumulation throughout all barrels and south of the structure.

Alert Code 1: Barrels separating 3/4 in to 1 in. Moderate cracking in walls and roof with efflorescence visible.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	BARNES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE DIVERSION	102 Direction of Traffic	2 2-way traffic
09 Location	5 SOUTH 1 WEST WEST FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 55' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	658287.6 5185529.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	170 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	October 26, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok, Maneval
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 12X18X50' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	151	80	120	21	31	0	0	0	0
1130/3:Cracking (RC and Other)	ft	31	0	0	100	31	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: End markers on all corners plus shoulder & wingwall delineation. Heavy silt accumulations at both ends.

Alert Code 1: 1.5" to 3' ft of silt in all barrels. Longitudinal crack all the way through the east outside wall and partially through the west outside wall. Minor cracking in west box roof. Roof is showing efflorescence. Minor random cracking. Leaching on both E & W walls & showing chairs.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	STANLEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH OF HORACE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 47' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 54' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	659902.4 5183919.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2005 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	October 09, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	53.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	35.8 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	78.08 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0009(029)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 14X16X217'RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/2:Re Conc Culvert Precast	ft	651	99	641	2	10	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Feb 25 2014 Ice thickness over running current of Sheyenne river is unknown. Inspection delay Outside walls have cracking with efflorescence. B & A at all 4 corners. Spall at NW corner where box meets wing. minor misalignment of sections. South end of center box is missing a tie at end section. OCT 09 2017 NEED BOAT FOR INSPECTION / CLEARANCE.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 09-138-31.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	STANLEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00949 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH OF HORACE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	11.498	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 47' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 54' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	660053.4 5184654.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel continuous	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 50 91 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 23 43 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	3,200 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	7.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	October 22, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	N
48 Length of Max Span	93 Ft.	Other Special	N
49 Structure Length	246.06 Ft.	218 Channel Profile	1 48 06/12/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/24/2016
	40.0 Ft.	213 Federal Aid Project Number	CBRS-949(52)
52 Deck Width	42.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch, Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-138-31.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	10,457	0	0	100	10,457	0	0	0	0
1120/2:Efflorescence/Rust Staining	sq.ft	45	0	0	100	45	0	0	0	0
Notes:Minor efflorescence staining on the bottom of the deck - 10/22/2019										
1130/2:Cracking (RC and Other)	sq.ft	10,412	0	0	100	10,412	0	0	0	0
Notes:Transverse cracking spaced less than 4' across the deck - 10/22/2019										
107/2:Steel Opn Girder/Beam	ft	1,230	100	1,230	0	0	0	0	0	0
1000/2:Corrosion	ft	1,230	100	1,230	0	0	0	0	0	0
Notes:Girders have minor corrosion, but consist of weathering steel. - 10/22/2019										
515/2:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat)	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Minor discoloration of weathering steel - 10/22/2019										
210/3:Re Conc Pier Wall	ft	98	100	98	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	98	88	86	12	12	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Shallow spalls beneath Girders 1 & 5 in north abutment - 10/22/2019										
1130/2:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:5 cracks in each abutment - 10/22/2019										
313/2:Fixed Bearing	each	10	0	0	100	10	0	0	0	0
1000/2:Corrosion	each	10	0	0	100	10	0	0	0	0
Notes:Minor corrosion of bearings which consist of weathering steel - 10/22/2019										
515/2:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Minor discoloration of weathering steel. - 10/22/2019										
331/2:Re Conc Bridge Railing	ft	492	89	437	11	55	0	0	0	0
Notes:Minor cracking of rails - 10/22/2019										
1130/2:Cracking (RC and Other)	ft	55	0	0	100	55	0	0	0	0
Notes:Minor cracking of rails - 10/22/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: End markers & guardrail on all corners. Span 2 beams have negative camber. - 10/22/2019

Alert Code 1: Minor random deck cracking-some efflorescence visible. N. abutment beam seats 1&5 have minor spalling. 11/15 - Abut 4 has cracking at the beam seats. Concrete Guardrail has random cracking, Fixed bearings are rusting with no section loss, water leakage by beam seats. 10/17 Small spall in NE backwall at beam corner. - 10/22/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-31.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	STANLEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE DIVERSION	102 Direction of Traffic	2 2-way traffic
09 Location	6 SOUTH 1 WEST WEST FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 47' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 55' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	658301.1 5183923.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	170 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	September 07, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	21.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	45.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 14X15.5X50' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-31.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	151	56	85	44	66	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	24	0	0	100	24	0	0	0	0
1130/3:Cracking (RC and Other)	ft	42	0	0	100	42	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor random cracking. Long crack in center & e barrel floor. Rip rap at both ends of culvert, which is covered by silt accumulations. B&A end markers at NE and NW corners. Shoulder and wingwall delineation. NE parapet has shear crack. 6" silt in center box.

Alert Code 1: Longitudinal cracking in both outside walls. Longitudinal crack in east and center barrel floors.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-32.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	STANLEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00944 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 1 WEST HORACE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	37.692	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 46' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 54' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	659409.3 5182305.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1992 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	175 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	25.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	January 31, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.8 Ft.	Underwater	N
48 Length of Max Span	15 Ft.	Other Special	N
49 Structure Length	46.92 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBRS-0944(55)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 14X16X80' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-138-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	240	73	175	26	63	1	2	0	0
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
1090/3:Exposed Rebar	ft	3	0	0	100	3	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	29	0	0	100	29	0	0	0	0
1130/3:Cracking (RC and Other)	ft	31	0	0	100	31	0	0	0	0
330/1:Metal Bridge Railing	ft	95	100	95	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/2:Headwalls	each	104	65	68	35	36	0	0	0	0
1130/2:Cracking (RC and Other)	each	36	0	0	100	36	0	0	0	0

Remarks: B&A markers all 4 corners. Debris hang on the S end of the structure. Headwalls have minor hair line cracked.

Alert Code 1: Shear cracked at SE corner have size up to 1/16" , Box # 1 , south end / roof have rebar exposed . Randomly crack with efflorescence showing on west& East wall of the structure & webwalls also.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-32.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	STANLEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00944 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE DIVERSION	102 Direction of Traffic	2 2-way traffic
09 Location	7 SOUTH 1 WEST WEST FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 46' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 55' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	658347.2 5182304.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	150 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	32 Ft.	90 Date of Last Inspection	September 18, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.8 Ft.	Underwater	N
48 Length of Max Span	13 Ft.	Other Special	N
49 Structure Length	57.09 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUADRUPLE, 13X14X80' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-32.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	322	65	209	35	113	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	34	0	0	100	34	0	0	0	0
1130/2:Cracking (RC and Other)	ft	79	0	0	100	79	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
8402/1:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: NBI Remarks: End markers all corners & wingwall delineation. Riprap at both ends of culvert. Silt accumulations at both ends of structure. East & West wall (boxes) have cracks & efflorescence showing

Alert Code 1: Minor longitudinal cracking in middle of the barrel floors. Longitudinal / shears crack in both outside walls.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-33.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HORACE CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	CITY OF HORACE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 45' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 54' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	659666.1 5180686.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 28 51 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1995 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	250 30 Year of ADT	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	8.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	December 17, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	47 Ft.	Other Special	N
49 Structure Length	143.04 Ft.	218 Channel Profile	1 48 06/12/2019
50 Curb/Sidewalk Widths	5.9 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	12/12/1996
52 Deck Width	36.7 Ft.	213 Federal Aid Project Number	DPI 0036(001)091
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch, Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-138-33.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	5,264	99	5,201	1	63	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	63	0	0	100	63	0	0	0	0
Notes:Several hairline cracks - 12/17/2019										
109/1:Pre Opn Conc Girder/Beam	ft	571	100	571	0	0	0	0	0	0
210/2:Re Conc Pier Wall	ft	75	100	75	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	75	100	75	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	138	100	138	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	285	84	240	16	45	0	0	0	0
1130/1:Cracking (RC and Other)	ft	45	0	0	100	45	0	0	0	0
Notes:Minor cracks in the rail - 12/17/2019										
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:Slope protection is buried in silt. - 12/17/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Date 11/9/2001 - 155' of chain link sidewalk railing on south side. NBI Remarks: Single b&a end markers on all four corners. Rip rap in place on both sides. Some gravel on deck , Banks have moderate silt accumulations with minor erosion. 10/22/19: Unable to inspect superstructure or substructure due to high water. 12/17/2019: Completed inspection. - 12/17/2019

Alert Code 1: Minor random deck cracking. - 12/17/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-33.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	STANLEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE DIVERSION	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF HORACE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 45' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 55' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	658396.0 5180689.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	190 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	September 18, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	21.0 Ft.	Underwater	N
48 Length of Max Span	13 Ft.	Other Special	N
49 Structure Length	57.09 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUADRUPLE, 13X13.5X50' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-138-33.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	142	0	0	71	142	0	0	0	0
1090/2:Exposed Rebar	ft	10	0	0	100	10	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	30	0	0	100	30	0	0	0	0
1130/2:Cracking (RC and Other)	ft	102	0	0	100	102	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: END MARKERS ON ALL CORNERS & WINGWALL DELINEATION. RIP RAP UP & DOWNSTREAM OF STRUCTURE.

Alert Code 1: Full length longitudinal crack in east wall of east box. Moderate cracking throughout walls, floor, wings, and parapets.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-139-03.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	42.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	NOBLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CASS COUNTY DRAIN 18	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 3 NORTH GARDNER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 11' 40.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 52' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	660702.5 5228968.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 15 27 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 7 13 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	24 Gravel/Dirt	209 Posted in "Tons"	12 Tons
Age and Service		Appraisal	
27 Yr Built	1951 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 19, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	Y 48 05/26/2015
49 Structure Length	25.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/24/2016
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-139-03.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	667	90	600	10	67	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	67	0	0	100	67	0	0	0	0
Notes:Random cracking throughout deck - 9/19/2019										
107/1:Steel Opn Girder/Beam	ft	131	0	0	100	131	0	0	0	0
1000/1:Corrosion	ft	131	0	0	100	131	0	0	0	0
Notes:Paint peeled to base metal 100%, rust evident - 9/19/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:Paint peeled to base metal 100%, rust evident - 9/19/2019										
216/2:Timber Abutment	ft	52	50	26	50	26	0	0	0	0
1900/2:Distortion	ft	26	0	0	100	26	0	0	0	0
Notes:South abutment bowed - 9/19/2019										
235/1:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
1020/1:Connection	ft	52	100	52	0	0	0	0	0	0
Notes:Both caps show minor rotation - 9/19/2019										
331/1:Re Conc Bridge Railing	ft	52	98	51	2	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Spall on East curb, South end - 9/19/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Posted 5 ton per axle, 12 ton gross. CSP with flap gates NW & SW. Yellow 6x12" pvc markers at SW, SE & NE - SW bent over. - 9/19/2019

Alert Code 1: Bottom plank of abutments are exposed & undermined. South abutment is bowed. Pile cracked & split N 1 and S 1, 3 & 6. South cap has minor rotation. North cap cracked at ends. NW & SW wings have damaged planks. - 9/19/2019

Alert Code 2: North pile 6 decayed - 9/19/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-139-13.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00918 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN B	102 Direction of Traffic	2 2-way traffic
09 Location	1.5 E OF ARGUSVILLE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 03' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	659682.3 5212847.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2015 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	480 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	November 14, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	0 01/01/1901
47 Total Horizontal Clearance	29.9 Ft.	Underwater	0 01/01/1901
48 Length of Max Span	14 Ft.	Other Special	0 01/01/1901
49 Structure Length	24.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	02/24/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 84" CMP & 14' SPPA		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-139-13.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	204	100	204	0	0	0	0	0	0
Notes:Incomplete Element Inspection 9/23/19 - 11/14/2019										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
Notes:Incomplete Element Inspection 9/23/19 - 11/14/2019										
2210/3:Movement	each	2	0	0	100	2	0	0	0	0
Notes:Incomplete Element Inspection 9/23/19 - 11/14/2019										

Remarks: Minor sway in roof of both culverts. Structure has diameter sizes culvert. - 11/14/2019**Alert Code 1:** Minor sway / deformed. - 11/14/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-139-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	HARWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 30	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 SO. ARGUSVILLE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 02' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 52' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	661089.2 5211445.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 32 58 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 35 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dir	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 23, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.3 Ft.	Other Special	N
48 Length of Max Span	29 Ft.	218 Channel Profile	1 48 06/12/2019
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/07/2017
51 Bridge Rdwy Width - Curb to Curb	24.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevold, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-139-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	249	75	187	25	62	0	0	0	0
1090/1:Exposed Rebar	ft	9	0	0	100	9	0	0	0	0
Notes:Corroded rebar & spalls in deck beam soffits. - 9/23/2019										
1120/1:Efflorescence/Rust Staining	ft	53	0	0	100	53	0	0	0	0
Notes:Cracking with efflorescence throughout deck - 9/23/2019										
202/2:Steel Column	each	3	0	0	100	3	0	0	0	0
1000/2:Corrosion	each	3	0	0	100	3	0	0	0	0
Notes:Minor corrosion on H pile - 9/23/2019										
515/2:Steel Protective Coating	sq.ft	999	0	0	0	100	999	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	100	999	0	0	0
Notes:Steel protective coating has mostly failed - 9/23/2019										
206/2:Timber Column	each	7	0	0	86	6	14	1	0	0
1170/2:Split/Delamination (Timber)	each	7	0	0	86	6	14	1	0	0
Notes:South abutment pile are split - 9/23/2019										
215/2:Re Conc Abutment	ft	26	54	14	46	12	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:N abut spalled on beam seats 4,5,7 - 9/23/2019										
1130/2:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes:Cracking in North abutment - 9/23/2019										
216/2:Timber Abutment	ft	26	0	0	100	26	0	0	0	0
4000/2:Settlement	ft	26	0	0	100	26	0	0	0	0
Notes:Minor settlement - 9/23/2019										
231/2:Steel Pier Cap	ft	26	0	0	100	26	0	0	0	0
1000/2:Corrosion	ft	26	0	0	100	26	0	0	0	0
Notes:Minor corrosion on pier cap - 9/23/2019										
515/2:Steel Protective Coating	sq.ft	999	0	0	0	100	999	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	100	999	0	0	0
Notes:Steel protective coating has mostly failed - 9/23/2019										
331/1:Re Conc Bridge Railing	ft	62	97	60	0	0	3	2	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	0	100	2	0	0	0
Notes:Spall on the Northwest corner of bridge rail - 9/23/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Yellow 6"x12" pvc markers on all corners. Drop structure in channel to east. South abut rebuilt 09/09 with new steel cap & 3 new h-pile. Scour under structure. - 9/23/2019

Alert Code 1: Corroded rebar & spalls in deck beam soffits. N abut spalled on beam seats 4,5,7 - 9/23/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-139-17.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	HARWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00945 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH OF HARWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.199	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 00' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 53' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	660000.5 5207431.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 34 62 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1996 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	240 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 01, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	33.8 Ft.	Underwater	N
48 Length of Max Span	85 Ft.	Other Special	N
49 Structure Length	313.98 Ft.	218 Channel Profile	1 48 06/12/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/12/1996
	34.1 Ft.	213 Federal Aid Project Number	BRC-0945(52)
52 Deck Width	36.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevold, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-139-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	11,464	99	11,314	1	150	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	150	0	0	100	150	0	0	0	0
Notes:Random cracking with efflorescence throughout deck - 10/1/2019										
104/2:Pre Clsd Box Girder	ft	1,572	94	1,482	6	90	0	0	0	0
1110/2:Cracking (PSC)	ft	90	0	0	100	90	0	0	0	0
Notes:Cracking with efflorescence on girder 1, span 3 - 10/1/2019										
210/2:Re Conc Pier Wall	ft	112	97	109	3	3	0	0	0	0
1130/2:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
Notes:Cracking in piers - 10/1/2019										
215/2:Re Conc Abutment	ft	72	92	66	8	6	0	0	0	0
1130/2:Cracking (RC and Other)	ft	6	0	0	100	6	0	0	0	0
Notes:Cracking in concrete abutments - 10/1/2019										
321/1:Re Conc Approach Slab	sq.ft	1,464	0	0	100	1,464	0	0	0	0
4000/1:Settlement	sq.ft	1,464	0	0	100	1,464	0	0	0	0
Notes:Approach slabs have minor settlement - 10/1/2019										
331/2:Re Conc Bridge Railing	ft	657	73	481	27	176	0	0	0	0
1130/2:Cracking (RC and Other)	ft	176	0	0	100	176	0	0	0	0
Notes:Cracks counted in concrete bridge rail - 10/1/2019										
8398/3:Slope Protection	each	5	100	5	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: W-beam guardrail at all corners. Approaches overlaid 2015. Minor random deck cracking with soffit efflorescence. Both approach slabs are undermined. Minor spalls in box girders, 1' on west girder span 3. Exterior diaphragms are cracked at piers. - 10/1/2019

Alert Code 2: Horizontal crack with leaching & efflorescence in span 2, west beam. - 10/1/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-139-18.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	HARWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00949 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF HARWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	24.795	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 58' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 53' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	660285.0 5204787.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	5	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	8 Desirable Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	700 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	11.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 01, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	N
48 Length of Max Span	74 Ft.	Other Special	N
49 Structure Length	375.00 Ft.	218 Channel Profile	1 48 06/24/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/04/1996
	40.0 Ft.	213 Federal Aid Project Number	CBRS-0949(53)
52 Deck Width	42.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-139-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	15,952	90	14,305	10	1,647	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	32	0	0	100	32	0	0	0	0
Notes:Spalls in deck have asphalt patches - 10/1/2019										
1120/1:Efflorescence/Rust Staining	sq.ft	20	0	0	100	20	0	0	0	0
Notes:Cracking with efflorescence on underside of deck - 10/1/2019										
1130/1:Cracking (RC and Other)	sq.ft	1,595	0	0	100	1,595	0	0	0	0
Notes:Random cracking throughout deck - 10/1/2019										
104/2:Pre Clsd Box Girder	ft	2,251	100	2,249	0	2	0	0	0	0
1090/2:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
Notes:Beam 4, span 3 spall near pier 4 - 10/1/2019										
202/2:Steel Column	each	18	0	0	100	18	0	0	0	0
1000/2:Corrosion	each	18	0	0	100	18	0	0	0	0
Notes:Minor corrosion on steel columns - 10/1/2019										
515/2:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Steel protective coating has limited effectiveness - 10/1/2019										
210/2:Re Conc Pier Wall	ft	85	95	81	5	4	0	0	0	0
1130/2:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:pier # 2 & # 3 have hairline cracks. - 10/1/2019										
215/2:Re Conc Abutment	ft	85	84	71	17	14	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	5	0	0	100	5	0	0	0	0
Notes:Cracking with efflorescence in abutments - 10/1/2019										
1130/2:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes:cracking in abutments under beam seats - 10/1/2019										
234/2:Re Conc Pier Cap	ft	171	99	169	1	2	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Pier cap 5 has a spall - 10/1/2019										
321/1:Re Conc Approach Slab	sq.ft	999	100	999	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	751	56	417	45	334	0	0	0	0
1130/2:Cracking (RC and Other)	ft	334	0	0	100	334	0	0	0	0
Notes:Cracks counted on concrete bridge rail - 10/1/2019										
8398/2:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Single B&A end markers all corners. W-beam guardrail on approach corners only. 4 1/2" conduit attached to north side barriers. 2" conduit attached to E side of pier 3, attached to barriers to E. USGS system at NE corner. Street lights mounted on north barrier railing, New approach guardrail installed at all 4 corners Both abutments have cracks with efflorescence showing, pier # 2 & # 3 have hairline cracks. span # 3 South edge has a spall. Beam # 4 /span # 3 is spalled & rebar exposed. Pier cap 5 has a spall. Minor to moderate channel debris in span 3 & pier 4. Backwalls have cracking. - 10/1/2019

Alert Code 1: Minor to moderate deck cracking, spalls up to 1'x4' with soffit spalling, rust staining, efflorescence & delamination - 10/1/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-139-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	REED TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH OF HARWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 52' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	661159.0 5201055.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	5		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	4 Low Slump Concrete	64 Oper. Rating	HS 50 91 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2014 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	210 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 10, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	75 Ft.	Other Special	N
49 Structure Length	375.00 Ft.	218 Channel Profile	1 48 05/23/2019
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/09/2014
	28.0 Ft.	213 Federal Aid Project Number	TB1206
52 Deck Width	30.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-139-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	11,250	100	11,250	0	0	0	0	0	0
520/3:Conc Re Prot Sys	sq.ft	11,250	100	11,250	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	1,500	100	1,500	0	0	0	0	0	0
Notes:minor chips no spalls - 6/10/2019										
210/3:Re Conc Pier Wall	ft	150	98	147	2	3	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	3	0	0	100	3	0	0	0	0
Notes:minor abrasion at the water line on the concrete pier walls - 6/10/2019										
215/2:Re Conc Abutment	ft	61	100	61	0	0	0	0	0	0
310/1:Elastomeric Bearing	each	24	100	24	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	750	100	750	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: 12/2014 - Bridge replaced with a new structure. Rough approaches / settling at deck ends. - 6/10/2019

Alert Code 1: Minor random deck cracking & efflorescence showing under span # 2 & # 3 . Minor cracks with efflorescence at rail blocks, north abutment has a hairline cracked. Fascia girder # 1 have a minor spall damaged. West end / Pier # 2 have several scratched. - 6/10/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-139-21.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	76.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	REED TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00928 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH OF HARWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	7.898	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 52' 60.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	661119.0 5200028.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 28 51 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 13 24 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	34 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1963 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	960 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	6.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 15, 2019
32 Approach Roadway Width	30 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	45 Ft.	218 Channel Profile	1 48 05/17/2017
49 Structure Length	47.90 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/24/2016
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-139-21.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,421	95	1,351	5	70	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	20	0	0	100	20	0	0	0	0
Notes:Cracking on the bottom side of the deck with efflorescence - 10/15/2019										
1130/1:Cracking (RC and Other)	sq.ft	50	0	0	100	50	0	0	0	0
Notes:Cracks areas a visible through the wear surface - 10/15/2019										
510/1:Wearing Surfaces	sq.ft	132	62	82	38	50	0	0	0	0
3220/1:Crack (Wearing Surface)	sq.ft	50	0	0	100	50	0	0	0	0
Notes:two 25' cracks though the width of the structure - 10/15/2019										
107/1:Steel Opn Girder/Beam	ft	240	75	180	25	60	0	0	0	0
1000/1:Corrosion	ft	240	75	180	25	60	0	0	0	0
Notes:Corrosion of the steel beams at 25% - 10/15/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	75	750	25	249	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	750	0	0	100	750	0	0	0	0
Notes:The protective paint coating is peeling approx. 75% remaining - 10/15/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	249	0	0	0	0	100	249	0	0
Notes:Approximately 25% of the protective coating is down to the primer or gone - 10/15/2019										
215/3:Re Conc Abutment	ft	59	76	45	24	14	0	0	0	0
1130/3:Cracking (RC and Other)	ft	14	0	0	100	14	0	0	0	0
Notes:14 cracks counted on the concrete abutments. - 10/15/2019										
330/1:Metal Bridge Railing	ft	95	100	95	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	95	74	70	26	25	0	0	0	0
1130/1:Cracking (RC and Other)	ft	25	0	0	100	25	0	0	0	0
Notes:minor cracking present in the concrete bridge rail - 10/15/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Single B&A end markers on all corners. Old piling in channel. Channel has heavy vegetation growth. new w-beam guardrail & bridge rail 2014. Chip seal in 2017 south edge of the deck / rail post # 1 has spall damage. - 10/15/2019

Alert Code 1: Scour under structure. Concrete in SE corner breaking out around beam. Cracked & efflorescence/ rust staining underside decking . Protective coating have peeling & fading in color 75% others exposing to the metal & start rusting . - 10/15/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-139-30.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	82.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	BARNES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00944 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH OF WEST FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	40.891	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 54' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	660107.3 5185524.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	99 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	57 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	31 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1971 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	1,750 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	6.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 17, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	30.8 Ft.	Other Special	N
48 Length of Max Span	35 Ft.	218 Channel Profile	1 48 06/12/2019
49 Structure Length	108.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	08/31/2009
51 Bridge Rdwy Width - Curb to Curb	30.8 Ft.	213 Federal Aid Project Number	
52 Deck Width	33.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevold, Finton, Czezok, Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-139-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/3:Pre Clsd Box Girder	ft	1,198	97	1,158	1	15	0	0	2	25
1080/3:Delamination/Spall/Patched Area	ft	15	0	0	100	15	0	0	0	0
Notes:Spalling in south girder - 12/17/2019										
1100/3:Exposed Prestressing	ft	25	0	0	0	0	0	0	100	25
Notes:South fascia beam has exposed and broken tensioning strands. Spalling with exposed strands in north fascia girder in east span. - 12/17/2019										
205/3:Re Conc Column	each	6	100	6	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	99	65	2	1	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Shallow spall near center of west abutment at beam seats. - 12/17/2019										
234/2:Re Conc Pier Cap	ft	66	96	63	5	3	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:N ends of Pier 2 & 3 cap are cracked. - 12/17/2019										
330/2:Metal Bridge Railing	ft	217	50	108	50	109	0	0	0	0
1000/2:Corrosion	ft	109	0	0	100	109	0	0	0	0
Notes:Minor corrosion on metal bridge rail - 12/17/2019										
515/2:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	217	69	150	31	67	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	26	100	26	0	0	0	0	0	0
1130/3:Cracking (RC and Other)	ft	67	0	0	100	67	0	0	0	0
Notes:Cracks counted in concrete bridge rail - 12/17/2019										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
Notes:12/17/2019: Unable to see condition of slope protection which is under water. - 12/17/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Riprap is shifting. B&a end markers on all 4 corners. Some efflorescence visible. Both north wings have been stabilized with sheet pile and rip rap. WEST ABUT/ SPAN # 1 : hairline cracked , under beam seat # 1 & # 3 had spall , Beam # 1 have Spall exposed prestress strand . Pier CAP # 2 : Heavy debris hang up on south-end , North end has cracked . Pier #3 : North end has cracked. EAST ABUT / SPAN # 3 : BEAM # 1/ # 2 & # 9 have spall & exposed Prestress strand. Abutment have random cracking , beam seat # 1/#2 & # 9 have spall. NE wingwall have cracked & undermine . DIVING SURFACE : asphalt over-lay had random cracking .
 10/24/2019: Inspection incomplete due to high water, need boat to inspect underside of structure.
 10/28/2019: Cannot inspect beneath with a boat due to unsafe conditions caused by swift current due to flooding.
 12/17/19: Completed inspection. - 12/17/2019

Alert Code 1: N ends of Pier 2 & 3 cap are cracked. NE wingwall have cracking & undermining - 12/17/2019

Alert Code 2: South fascia beam has exposed and broken tensioning strands in east span. Exposed strands in south fascia girder in west span, and north fascia girder of east span. - 12/17/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-140-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	49.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	NOBLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CASS COUNTY DRAIN 32	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 1 NORTH GARDNER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 09' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 51' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	661874.4 5225745.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 19 35 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 9 16 Tons
Dk Protect	None	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	17 Tons
Age and Service		Appraisal	
27 Yr Built	1971 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 20, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 05/21/2019
49 Structure Length	34.12 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/24/2016
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevold, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-140-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	872	100	872	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	171	0	0	100	171	0	0	0	0
1000/2:Corrosion	ft	171	0	0	100	171	0	0	0	0
Notes:Minor corrosion on girders - 9/20/2019										
515/2:Steel Protective Coating	sq.ft	999	0	0	50	500	50	499	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	999	0	0	50	500	50	499	0	0
Notes:Steel protective coating has limited effectiveness - 9/20/2019										
206/2:Timber Column	each	12	50	6	25	3	25	3	0	0
1170/2:Split/Delamination (Timber)	each	3	0	0	0	0	100	3	0	0
Notes:E pile 2, 4 & 6 are split. - 9/20/2019										
7000/2:Damage	each	3	0	0	100	3	0	0	0	0
Notes:Fire damage to piles W 1,2 and E 1 - 9/20/2019										
216/2:Timber Abutment	ft	52	77	40	23	12	0	0	0	0
7000/2:Damage	ft	12	0	0	100	12	0	0	0	0
Notes:Fire damage done to the South ends of the abutments - 9/20/2019										
235/2:Timber Pier Cap	ft	52	39	20	39	20	23	12	0	0
1160/2:Crack (Timber)	ft	20	0	0	100	20	0	0	0	0
7000/2:Damage	ft	12	0	0	0	0	100	12	0	0
Notes:Fire damage to South ends of caps - 9/20/2019										
331/1:Re Conc Bridge Railing	ft	69	96	66	4	3	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:Spalling on concrete curbs - 9/20/2019										
8401/2:Wings	each	4	50	2	25	1	0	0	25	1
7000/2:Damage	each	2	0	0	50	1	0	0	50	1
Notes:Major fire damage to SE/SW wingwalls - top 1/2 of SW wingwall is gone. - 9/20/2019										

Remarks: No end markers or rail. Signed 8 ton per axle, 17 ton gross, west only. Old pile in channel. - 9/20/2019

Alert Code 1: Fire damage S side both abuts & 2 pile each side. Scour under structure. Bottom plank of east abutment exposed. 5' deep erosion holes behind abuts at SE & SW corners. Both caps split on south end. - 9/20/2019

Alert Code 2: Major fire damage to SE/SW wingwalls - top 1/2 of SW wingwall is gone. E pile 2, 4 & 6 are split. - 9/20/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-140-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	WISER TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CASS COUNTY DRAIN 13	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 2 SOUTH GARDNER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 07' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 51' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	662406.0 5220916.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 46 83 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1940 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	September 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.2 Ft.	Underwater	N
48 Length of Max Span	39 Ft.	Other Special	N
49 Structure Length	81.04 Ft.	218 Channel Profile	1 48 05/21/2019
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	26.2 Ft.	212 Structure Load Rated	03/08/2018
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevold, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-140-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	2,267	83	1,870	18	397	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	20	0	0	100	20	0	0	0	0
Notes:Minor spalls on underside of beams - 9/23/2019										
1110/1:Cracking (PSC)	ft	377	0	0	100	377	0	0	0	0
Notes:Random cracking throughout beam 3 - 9/23/2019										
202/2:Steel Column	each	20	0	0	100	20	0	0	0	0
1000/2:Corrosion	each	20	0	0	100	20	0	0	0	0
Notes:Minor corrosion on steel columns - 9/23/2019										
515/2:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/2:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:No steel protective coating - 9/23/2019										
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
231/1:Steel Pier Cap	ft	89	0	0	100	89	0	0	0	0
1000/1:Corrosion	ft	89	0	0	100	89	0	0	0	0
Notes:Minor corrosion on steel pier cap - 9/23/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Steel protective coating has limited effectiveness - 9/23/2019										
235/1:Timber Pier Cap	ft	89	0	0	100	89	0	0	0	0
1160/1:Crack (Timber)	ft	89	0	0	100	89	0	0	0	0
Notes:Weathering cracks in timber caps - 9/23/2019										
330/1:Metal Bridge Railing	ft	161	0	0	100	161	0	0	0	0
1000/1:Corrosion	ft	161	0	0	100	161	0	0	0	0
Notes:Minor corrosion on metal bridge rail - 9/23/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Steel protective coating has limited effectiveness - 9/23/2019										
331/1:Re Conc Bridge Railing	ft	161	0	0	100	161	0	0	0	0
1190/1:Abrasion(PSC/RC)	ft	161	0	0	100	161	0	0	0	0
Notes:Minor abrasion on concrete curbs - 9/23/2019										
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
1900/2:Distortion	each	3	0	0	100	3	0	0	0	0
Notes:NE, NW, SE wing walls have minor distortion - 9/23/2019										
7000/2:Damage	each	1	0	0	100	1	0	0	0	0
Notes:Top of Southwest wing wall has damage - 9/23/2019										

Remarks: Riprap on slopes under structure & in SW ditch. PVC end markers on all corners. 3/4" pvc attached to north side.
Damage to Southwest wingwall - 9/23/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-140-08.0

Alert Code 1: Minor chips in T-beams, couple areas with exposed steel. Some spalls on deck have been filled with grout. Minor erosion around wings. Rail posts on west are both damaged & have spalled concrete. Spalls on top of beams at ends & pier. NW bank has a slide. East channel beam 3 has cracking with efflorescence. -
9/23/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-140-18.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	HARWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00949 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST OF HARWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	25.594	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 58' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 52' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	662032.7 5204829.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 43 78 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 23 43 Tons
208 Dk Overburden	32 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	240 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	40.7 Ft.	Underwater	N
48 Length of Max Span	57 Ft.	Other Special	N
49 Structure Length	61.02 Ft.	218 Channel Profile	1 48 05/22/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	41.0 Ft.	212 Structure Load Rated	03/08/2018
52 Deck Width	44.0 Ft.	213 Federal Aid Project Number	CB9101-2204
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevoid, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-140-18.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	548	99	544	1	4	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes:Minor chips on T beams - 9/25/2019										
215/2:Re Conc Abutment	ft	89	92	82	8	7	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	7	0	0	100	7	0	0	0	0
Notes:4 cracks in East abutment, 3 cracks in West abutment - 9/25/2019										
321/1:Re Conc Approach Slab	sq.ft	999	100	999	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	121	92	111	8	10	0	0	0	0
1130/1:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:Cracks counted in concrete bridge rail - 9/25/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: W-beam guardrail all corners. NW & NE rail W-beam has traffic impact. CSP with flap gates at all corners. Approach roadway & slabs microsurfaced 2015. - 9/25/2019

Alert Code 1: South T-beam chipped in 3 locations. 1 chip in N T-beam. West abut has moderate leaching at beams 2-4 with rust staining at 3. Approach slabs have settled & been overlaid. NW approach curb is broke. Water leaching between girders 1-3, 6&7. - 9/25/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-140-19.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	HARWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00945 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF HARWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	25.894	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 58' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 52' 23.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	661779.7 5204117.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1948 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	575 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	11.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	44 Ft.	90 Date of Last Inspection	October 15, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	55.4 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	32.15 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10X7X57' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 09-140-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	171	87	149	13	22	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:minor spall in the parapet on the east side 1x1 - 10/15/2019										
1130/2:Cracking (RC and Other)	ft	21	0	0	100	21	0	0	0	0
Notes:On 10/15 21 cracks were counted in the box barrels - 10/15/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: PVC markers on all corners. No signing. 2 CSP culverts in channel (not inspected), box is to the south. CSP with flap gate in SE bank. Roadway overlaid 2015 indicating possible settlement. - 10/15/2019

Alert Code 1: Minor scour. Wing walls are separating. Minor separation of construction joints. Minor cracking between walls & ceiling all boxes, roof has minor cracking in north box. Minor cracks with efflorescence. East parapet & NE corner has minor spalling. - 10/15/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-140-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	68.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	REED TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH OF HARWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 52' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	661354.6 5201644.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel continuous	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 44 80 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 26 48 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1976 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 14, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	17 Ft.	218 Channel Profile	1 48 05/15/2017
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	08/24/2016
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-140-20.0

Structure Number: 09-140-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	743	0	0	100	743	0	0	0	0
1180/1:Abrasion	sq.ft	743	0	0	100	743	0	0	0	0
Notes:Minor abrasion of driving surface - 11/14/2019										
107/1:Steel Opn Girder/Beam	ft	249	0	0	100	249	0	0	0	0
1000/1:Corrosion	ft	249	0	0	100	249	0	0	0	0
Notes:Minor corrosion of the girders - 11/14/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	70	700	20	200	10	99
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	70	700	20	200	10	99
Notes:Varying degrees of paint effectiveness - 11/14/2019										
205/2:Re Conc Column	each	10	0	0	90	9	10	1	0	0
1080/2:Delamination/Spall/Patched Area	each	1	0	0	0	0	100	1	0	0
Notes:Pier 2 pile 4 in poor condition with expose rebar & spalled concrete. - 11/14/2019										
1190/2:Abrasion(PSC/RC)	each	9	0	0	100	9	0	0	0	0
Notes:Minor wear of concrete columns - 11/14/2019										
206/3:Timber Column	each	6	0	0	100	6	0	0	0	0
1150/3:Check/Shake	each	6	0	0	100	6	0	0	0	0
Notes:Shallow splits on all pile in east abutment - 11/14/2019										
210/3:Re Conc Pier Wall	ft	26	0	0	100	26	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	26	0	0	100	26	0	0	0	0
Notes:Minor wear of concrete wall - 11/14/2019										
215/3:Re Conc Abutment	ft	26	54	14	46	12	0	0	0	0
1130/3:Cracking (RC and Other)	ft	12	0	0	100	12	0	0	0	0
Notes:Cracking throughout west abutment. Cracking at south corner is below water line 11/19. - 11/14/2019										
216/3:Timber Abutment	ft	26	100	26	0	0	0	0	0	0
234/2:Re Conc Pier Cap	ft	26	65	17	35	9	0	0	0	0
1130/2:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes:Cracking in caps for west abutment and center pier - 11/14/2019										
235/2:Timber Pier Cap	ft	26	0	0	100	26	0	0	0	0
1150/2:Check/Shake	ft	13	0	0	100	13	0	0	0	0
Notes:Shallow splitting of timber caps at both abutments - 11/14/2019										
1900/2:Distortion	ft	13	0	0	100	13	0	0	0	0
Notes:East timber cap is rotating - 11/14/2019										
330/1:Metal Bridge Railing	ft	62	0	0	100	62	0	0	0	0
1000/1:Corrosion	ft	62	0	0	100	62	0	0	0	0
Notes:Metal Bridge rail is rusted with no section loss - 11/14/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Effectiveness is limited - 11/14/2019										
332/1:Timb Bridge Railing	ft	62	0	0	100	62	0	0	0	0

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1140/1:Decay/Section Loss	ft	62	0	0	100	62	0	0	0	0
Notes:Entire Timber rail has decay with section loss but less then 10% of the member is affected - 11/14/2019										
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes:Top plank of SW and SE wings are split - 11/14/2019										

Remarks: REMARKS: 6"x 12" PVC B&A marker on approach corners. 2" gravel overburden - 11/14/2019

Alert Code 1: Pier 2 pile 4 in poor condition with exposed rebar & spalled concrete. Paint peeled to base metal-rust evident-50% of surface area. Gaps between bottom planks and next plank in E backwall & wingwalls. W abut concrete cap cracking. East pile 2,4,5&6 split, 3 misaligned. Stringer bearing plates not in contact with west abut timber cap at north end. Concrete pier cap overhangs broken. E abut timber cap split at ends & rotating. SW corner of abut cracked. - 11/14/2019

Alert Code 2: Timber plank on top of pier cap is missing leaving girders suspended, and no bearing on the pier. - 11/14/2019

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SEC 409

Structure Number: 09-140-21.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	REED TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00928 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	3 S 1 E OF HARWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 51' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	662822.4 5200074.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2005 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	960 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	6.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	29 Ft.	90 Date of Last Inspection	October 01, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.0 Ft.	Underwater	N
48 Length of Max Span	9 Ft.	Other Special	N
49 Structure Length	22.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 11 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevoid, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
SINGLE 9 X 6 X 84' RCB AND A SINGLE 9 X 84' I		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-140-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	168	93	156	7	12	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	6	0	0	100	6	0	0	0	0
Notes:Spalling at joints in hot box and culvert - 10/1/2019										
1900/1:Distortion	ft	6	0	0	100	6	0	0	0	0
Notes:Minor misalignment in box and culvert - 10/1/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Precast box installed next to RCP under CR 20 at 45th St. Single B&A end markers all corners. Round culvert has joints wrapped with fabric. CSP with flap gates on all corners. Spall with exposed steel on top of round at N end on FES. Sediment inside round culvert, cat tails at north end. 2/14 East box had minor hairline cracks along the roof walls & lifting holes. random sections have separated 3/4" misalignment 3/4", West box had random spalls at section joint / separated up to 1-7/8" misalignment up to 7/8". - 10/1/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-141-01.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00949 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CASS COUNTY DRAIN 42	102 Direction of Traffic	2 2-way traffic
09 Location	7 E OF GRANDIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 08' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 50' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	662959.2 5233531.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2012 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	140 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	18.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	September 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	36.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	02/24/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevoid, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
TRIPLE 117" 79" X 90" SPPA		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 09-141-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	270	99	267	1	3	0	0	0	0
6000/3:Scour	ft	3	0	0	100	3	0	0	0	0
Notes:Channel aggregated & scour on east end. - 9/19/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: 4/2016 - North pipe has gravel accumulation and standing water. Channel aggregated & scour on east end. - 9/19/2019

January 03, 2020

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-141-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	NOBLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ASS COUNTY DRAINS 19&32	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 2 NORTH GARDNER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 10' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 51' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	662703.7 5227371.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 46 83 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1975 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	September 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.6 Ft.	Underwater	N
48 Length of Max Span	39 Ft.	Other Special	N
49 Structure Length	81.04 Ft.	218 Channel Profile	1 48 05/21/2019
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/08/2018
	22.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevold, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-141-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	2,008	99	1,986	0	0	1	22	0	0
1080/1:Delamination/Spall/Patched Area	ft	22	0	0	0	0	100	22	0	0
Notes:Spalling on T beam members - 9/20/2019										
202/3:Steel Column	each	6	0	0	100	6	0	0	0	0
1000/3:Corrosion	each	6	0	0	100	6	0	0	0	0
Notes:Corrosion on steel pile - 9/20/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Steel protective coating is substantially effective - 9/20/2019										
206/2:Timber Column	each	13	0	0	100	13	0	0	0	0
1160/2:Crack (Timber)	each	13	0	0	100	13	0	0	0	0
Notes:All timber columns have cracking - 9/20/2019										
216/1:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
231/1:Steel Pier Cap	ft	25	0	0	100	25	0	0	0	0
1000/1:Corrosion	ft	25	0	0	100	25	0	0	0	0
Notes:Minor Corrosion on steel pier cap - 9/20/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Steel protective coating is substantially effective - 9/20/2019										
235/1:Timber Pier Cap	ft	50	0	0	100	50	0	0	0	0
1160/1:Crack (Timber)	ft	50	0	0	100	50	0	0	0	0
Notes:Timber caps have minor cracking - 9/20/2019										
331/1:Re Conc Bridge Railing	ft	161	0	0	100	161	0	0	0	0
7000/1:Damage	ft	161	0	0	100	161	0	0	0	0
Notes:Curbs are misaligned, tipping & spalled. - 9/20/2019										
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: N side has PVC markers. Horizontal curves both directions. East pile 2 cut out & spliced, replaced timber pier cap with steel & bolted outside girders together 2015. scour under span 1. Rebar exposed on SE fascia beam. Timber caps are cracked. - 9/20/2019

Alert Code 1: Rust on pile at waterline. Curbs are misaligned, tipping & spalled. East pile 1 is split, 2 repaired. Many girders are spalled underneath. N steel pile twisted at cap. Steel crossbraces breaking off. Girder openings after bracing top/bottom south 2 1/8"/2 1/4"; north 1"/1 1/2". - 9/20/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-141-07.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	WISER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00949 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CASS COUNTY DRAIN 23	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST OF GARDNER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	37.992	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 08' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 50' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	664114.6 5222554.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1994 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	140 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	18.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	December 17, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	17 Ft.	Other Special	N
49 Structure Length	34.12 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	ER-BRC 0949(56)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch, Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 16X10X104' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-141-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	207	80	166	20	41	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	15	0	0	100	15	0	0	0	0
Notes:Vertical crack at the NE corner of north box. Cracks with leaching & efflorescence on walls & roof. - 12/17/2019										
1130/2:Cracking (RC and Other)	ft	26	0	0	100	26	0	0	0	0
Notes:Vertical crack at the NE corner of north box. Cracks with leaching & efflorescence on walls & roof. - 12/17/2019										
8398/1:Slope Protection	each	1	0	0	100	1	0	0	0	0
Notes:12/17/19: Slope protection is underwater/ice. - 12/17/2019										
8401/2:Wings	each	4	50	2	50	2	0	0	0	0
1080/2:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes:SW wingwall/box joint has a spall with exposed rebar which has been patched. - 12/17/2019										
1130/2:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:SW and NE wings are cracked with efflorescence visible. - 12/17/2019										

Remarks: Yellow PVC end markers on all corners. Embankment erosion and settlement up and down stream. Construction joints sealed with epoxy. 6 inches of sediment in the bottom of the barrels. Incomplete Inspection 9/23/19 due to structure being under water. Incomplete Inspection 11/13/19 due to structure has thin ICE. 12/17/19:CHANGED RATING FROM 5 TO 6. CAN FREQUENCY BE CHANGED TO 48 MONTH? - 12/17/2019

Alert Code 1: SW and NE wing walls are cracked with efflorescence. SW wing/box joint has spalling with exposed rebar, which has been patched. Vertical crack at the NE corner of north box. Cracks with leaching & efflorescence on walls & roof. Separation of construction joint with spalling & exposed rebar on the east wingwall, box wall & roof. Hairline cracking at the west parapet. - 12/17/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-141-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	HARWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00949 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN NO. 29	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 1 NORTH ARGUSVILLE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	10.298	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 03' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 50' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	664213.8 5214451.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	49 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	23 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1956 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	100 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 23, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/21/2019
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/24/2016
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevold, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-141-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	764	91	692	9	72	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	72	0	0	100	72	0	0	0	0
Notes:Random cracking throughout deck - 9/23/2019										
107/1:Steel Opn Girder/Beam	ft	151	0	0	100	151	0	0	0	0
1000/1:Corrosion	ft	151	0	0	100	151	0	0	0	0
Notes:Minor corrosion on girders - 9/23/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	50	500	50	499	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	50	500	50	499	0	0
Notes:Steel protective coating has limited effectiveness - 9/23/2019										
206/3:Timber Column	each	12	0	0	42	5	58	7	0	0
1170/3:Split/Delamination (Timber)	each	12	0	0	42	5	58	7	0	0
Notes:Timber pile have been repaired with corrugated steel pipe bands - 9/23/2019										
216/3:Timber Abutment	ft	56	75	42	25	14	0	0	0	0
7000/3:Damage	ft	14	0	0	100	14	0	0	0	0
Notes:Fire damage to North abutment - 9/23/2019										
235/1:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	59	0	0	100	59	0	0	0	0
1000/1:Corrosion	ft	59	0	0	100	59	0	0	0	0
Notes:Minor corrosion on bridge rail - 9/23/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Steel protective coating is substantially effective - 9/23/2019										
331/1:Re Conc Bridge Railing	ft	59	100	59	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Moderate erosion around side pipes in NW,NE&SE quads. PVC end markers all 4 corners. Yellow RPMs on rail. 6/25/2018 - Alert code 3 memo states north abutment timber cap was replaced and both abutment piling were reinforced with a metal band. Moderate erosion around North wingwalls. Debris on South abutment cap. North abutment cap has damage. Gravel on the abutment caps. NW wingwall pile shimmed and reattached to wingwall. South abutment cap has minor rotation. North piles 1 & 2 have 2" splits(that have been filled with grout). - 9/23/2019

Alert Code 1: North abutment has minor fire damage. Paint peeled to base metal-rust evident-50% of surface area. - 9/23/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-141-15.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	88.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	HARWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00949 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 2 EAST HARWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	30.693	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 01' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 50' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	664348.5 5210842.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	6	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 37 67 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	140 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 0 0 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	September 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.8 Ft.	Underwater	N
48 Length of Max Span	100 Ft.	Other Special	N
49 Structure Length	452.10 Ft.	218 Channel Profile	1 48 05/22/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	02/14/1997
	32.2 Ft.	213 Federal Aid Project Number	CRS-HHS-949(51)
52 Deck Width	34.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-141-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	15,597	100	15,597	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	2,260	100	2,260	0	0	0	0	0	0
1110/1:Cracking (PSC)	ft	25	100	25	0	0	0	0	0	0
202/2:Steel Column	each	35	60	21	40	14	0	0	0	0
1000/2:Corrosion	each	14	0	0	100	14	0	0	0	0
Notes:Minor corrosion on steel columns - 9/24/2019										
515/2:Steel Protective Coating	sq.ft	999	0	0	60	600	40	399	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	999	0	0	60	600	40	399	0	0
Notes:Paint protective coating is substantially effective to limited effective. - 9/24/2019										
210/2:Re Conc Pier Wall	ft	98	33	32	0	0	67	66	0	0
1130/2:Cracking (RC and Other)	ft	66	0	0	0	0	100	66	0	0
Notes:Horizontal cracking in pier walls - 9/24/2019										
215/2:Re Conc Abutment	ft	69	94	65	6	4	0	0	0	0
1130/2:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:Cracks counted in concrete abutments - 9/24/2019										
234/1:Re Conc Pier Cap	ft	164	98	161	2	3	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:Minor spalling in pier caps - 9/24/2019										
321/1:Re Conc Approach Slab	sq.ft	999	100	999	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	906	78	706	22	200	0	0	0	0
1130/1:Cracking (RC and Other)	ft	200	0	0	100	200	0	0	0	0
Notes:Cracks counted in concrete bridge rail - 9/24/2019										
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Minor settlement - 9/24/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: W-beam guardrail on approach corners. Concrete from old structure in channel. Piers measured with 2' level at center of pier: 2 3 4 5 6 11/07@37D: 1/2" N/A N/A 1 1/4" N/A 12/09@10D: N/A 1" 1" N/A N/A 11/13@39D: 3/8" 1/2" 1 1/4" 1 3/4" 1/4" 10/15@36D: 3/4" N/A 1 3/8" 1 5/8" 3/8" 10/17@46D: 1/4" N/A 7/8" 1/4" 1/4" 09/19@56D: 1" N/A N/A 2 1/8" 0" Piers are out of plumb which have been measured with 2 feet level at center. - 9/24/2019

Alert Code 1: S appr. slab settled, both undermined. Moderate erosion around piers. N abut, beam 3 seat spalled. Minor soffit effl. Piers are out of plumb. Multiple beams have minor hairline cracking. - 9/24/2019

Alert Code 2: Many are spalled out & diaphragms, caps & walls are cracked at piers 4&5 - breaking at cap/wall joint & around pile 6. Pier 2 S beam #2 has exposed rebar. Pier 4&5 web walls cracked below cap & in end beam, paint on steel columns cracked & peeled due to flexure of column. - 9/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-141-38.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	PLEASANT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 1 NORTH OF HICKSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 41' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 50' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	664590.7 5172772.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1976 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 30, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	37.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.5 Ft.	Underwater	N
48 Length of Max Span	13 Ft.	Other Special	N
49 Structure Length	35.10 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok, Maneval
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X6X52' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-141-38.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	105	76	80	23	24	1	1	0	0
1090/3:Exposed Rebar	ft	1	0	0	0	0	100	1	0	0
1130/3:Cracking (RC and Other)	ft	16	0	0	100	16	0	0	0	0
1900/3:Distortion	ft	8	0	0	100	8	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0

Remarks: Signed 'watch for high water' both directions. Sw corner has exposed rebar. 10/18/2010 - PVC markers ar NE, NW, & SW corners. 10/29/2013: 4" clearance between waterline and top of box. Wingwall have cracks.

Alert Code 1: Minor, random cracking & section misalignment throughout. one small spall area - barrel 1, exterior wall, north end.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-141-38.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	PLEASANT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH ST. BENEDICT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 42' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 50' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	665034.4 5174149.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	6 Bituminous	64 Oper. Rating	HS 21 38 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 12 22 Tons
208 Dk Overburden	31 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1987 106 Yr Reconstructed	2014	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	5 Above Min Tolerable
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	24 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	-1.00	71 Waterway Adequacy	9 Above Desirable
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	8 Equal Desirable Crit
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	24 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	October 17, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	24.0 Ft.	Fracture Critical	N
48 Length of Max Span	51 Ft.	Underwater	N
49 Structure Length	151.90 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	218 Channel Profile	1 48 06/20/2017
	0.7 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb		207 Transporter Erector Routes and Sites	-1
	24.0 Ft.	212 Structure Load Rated	08/24/2016
52 Deck Width	25.9 Ft.	213 Federal Aid Project Number	PLEASANT TWSP.
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-141-38.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	3,950	90	3,551	10	399	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	399	0	0	100	399	0	0	0	0
Notes:minor decay on the and staining on the bottom of the deck - 10/17/2019										
510/1:Wearing Surfaces	sq.ft	3,950	75	2,951	25	999	0	0	0	0
3220/1:Crack (Wearing Surface)	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Wearing surface is cracked every 4.5 feet across the deck - 10/17/2019										
107/1:Steel Opn Girder/Beam	ft	1,371	100	1,371	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	100	100	0	0	0	0	0	0
205/2:Re Conc Column	each	5	60	3	40	2	0	0	0	0
1130/2:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
Notes:Cracking on the two outside concrete columns - 10/17/2019										
215/2:Re Conc Abutment	ft	26	0	0	0	0	100	26	0	0
1130/2:Cracking (RC and Other)	ft	26	0	0	0	0	100	26	0	0
Notes:Moderate cracking on the concrete abutment - 10/17/2019										
216/1:Timber Abutment	ft	28	100	28	0	0	0	0	0	0
225/1:Steel Pile	(EA)	7	100	7	0	0	0	0	0	0
1000/1:Corrosion	(EA)	7	100	7	0	0	0	0	0	0
Notes:minor surface rust no flaking present - 10/17/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Protective coating is substantial - 10/17/2019										
229/3:Other Pile	(EA)	8	100	8	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	28	100	28	0	0	0	0	0	0
1000/2:Corrosion	ft	28	100	28	0	0	0	0	0	0
Notes:surface rust present no flaking taking place - 10/17/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Steel pier cap has minimal surface rust, steel protective coating is adequate - 10/17/2019										
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
234/2:Re Conc Pier Cap	ft	52	100	52	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	305	0	0	100	305	0	0	0	0
8398/2:Slope Protection	each	1	0	0	100	1	0	0	0	0
2210/2:Movement	each	1	0	0	100	1	0	0	0	0
Notes:slope protection is moving due to water flow - 10/17/2019										
8401/2:Wings	each	4	50	2	50	2	0	0	0	0
1130/2:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
Notes:minor cracking in the concrete wings - 10/17/2019										

Remarks: New south abutment 2014. Cracking in north abutment and concrete piling. N abut top is in 1 1/4" in 2' in 2009.
10/15 - 1 1/4" N abut top, - 10/17/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-141-38.1

Alert Code 2: Unsupported timber rail, curb stressing deck tie bolts, splitting outside planks, rail is leaning outward. Heavy erosion NW corner, - 10/17/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-141-39.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	PLEASANT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST OF HICKSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 40' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 51' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	664018.3 5171148.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	5	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	K Closed to all traffic
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 34 62 Tons
208 Dk Overburden	31 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	0 Tons
27 Yr Built	2003 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	December 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	189.96 Ft.	218 Channel Profile	Y 48 07/14/2015
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	212 Structure Load Rated	02/05/2004
52 Deck Width	26.2 Ft.	213 Federal Aid Project Number	COUNTY NO. TB0209
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-141-39.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	4,983	100	4,983	0	0	0	0	0	0
Notes:Surface wearing & cracked. - 12/19/2019										
1150/1:Check/Shake	sq.ft	1	100	1	0	0	0	0	0	0
Notes:Laminated deck . - 12/19/2019										
510/1:Wearing Surfaces	sq.ft	463	78	363	22	100	0	0	0	0
Notes:Minor surface wearing. - 12/19/2019										
3220/1:Crack (Wearing Surface)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:transverse cracked in random location . - 12/19/2019										
107/1:Steel Opn Girder/Beam	ft	928	0	0	100	928	0	0	0	0
Notes:Functioning but protective coating has failed, slightly rust forming. - 12/19/2019										
1000/1:Corrosion	ft	928	0	0	100	928	0	0	0	0
Notes:Rust has initiated forming. - 12/19/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	50	500	50	499	0	0
Notes:Failed on protection. - 12/19/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	50	500	50	499	0	0
Notes:No longer effectiveness. - 12/19/2019										
202/2:Steel Column	each	34	0	0	65	22	35	12	0	0
Notes:Protective coating & rust forming. - 12/19/2019										
1000/2:Corrosion	each	34	0	0	65	22	35	12	0	0
Notes:Slight rust had forming in various degree. - 12/19/2019										
515/2:Steel Protective Coating	sq.ft	999	0	0	33	333	67	666	0	0
Notes:Protective coating has failed. - 12/19/2019										
216/2:Timber Abutment	ft	48	100	48	0	0	0	0	0	0
Notes:Defection has not found. - 12/19/2019										
231/1:Steel Pier Cap	ft	48	0	0	100	48	0	0	0	0
Notes:Functioning but failed on protective coating & rust has initiated. - 12/19/2019										
1000/1:Corrosion	ft	48	0	0	100	48	0	0	0	0
Notes:Corrosion has initiated forming. - 12/19/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Very limited protection coating. - 12/19/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	100	999	0	0	0	0
Notes:No longer effectiveness. - 12/19/2019										
332/1:Timb Bridge Railing	ft	380	97	370	3	10	0	0	0	0
Notes:Damaged. - 12/19/2019										
7000/1:Damage	ft	10	0	0	100	10	0	0	0	0
Notes:NW railing has damaged. - 12/19/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
Notes:New wing in 2019. - 12/19/2019										

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-141-39.0

Remarks: All connections welded. Asphalt overlay is cracking. Erosion at nw sw se ditches. Old abutments and pile in channel. 10/15 - Timber rail has some minor damage ,NW wing wall and slope installed in 2019. - 12/19/2019

Alert Code 1: Heavy drift accumulation hung up on south end of structure. Paint peeled to base metal - rust evident - 60% of surface area. Center 2 pier piles have minor section loss. - 6/10/2019 - 12/19/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-141-40.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	PLEASANT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 1 SOUTH OF HICKSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 39' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 51' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	664085.3 5169536.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 21 39 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1993 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	32 Ft.	90 Date of Last Inspection	June 10, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.8 Ft.	Underwater	N
48 Length of Max Span	78 Ft.	Other Special	N
49 Structure Length	255.91 Ft.	218 Channel Profile	1 48 06/20/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	30.8 Ft.	212 Structure Load Rated	06/15/1993
52 Deck Width	32.5 Ft.	213 Federal Aid Project Number	BRO-9(15)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-141-40.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	8,321	91	7,564	9	757	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:There is cracking running with the skew of the piers on the concrete deck - 6/10/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	657	0	0	100	657	0	0	0	0
Notes:minor abrasion on concrete deck - 6/10/2019										
109/1:Pre Opn Conc Girder/Beam	ft	1,280	100	1,280	0	0	0	0	0	0
210/2:Re Conc Pier Wall	ft	92	78	72	22	20	0	0	0	0
1190/2:Abrasion(PSC/RC)	ft	20	0	0	100	20	0	0	0	0
Notes:There is some minor abrasion from water flow on the pier walls - 6/10/2019										
215/2:Re Conc Abutment	ft	92	96	88	4	4	0	0	0	0
1130/2:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:There is some minor cracking on the concrete abutment, could be changed to CS1 because they are hair line - 6/10/2019										
300/1:Strip Seal Exp Joint	ft	2	0	0	100	2	0	0	0	0
2350/1:Debris Impaction	ft	2	0	0	100	2	0	0	0	0
Notes:sand has filled the strip seal expansion joints - 6/10/2019										
310/1:Elastomeric Bearing	each	10	0	0	100	10	0	0	0	0
2220/1:Alignment	each	10	0	0	100	10	0	0	0	0
Notes:Elastomeric Bearings have some minor movement - 6/10/2019										
313/1:Fixed Bearing	each	20	100	20	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	512	100	512	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: No Curb. Bridge railing is thrie beam. - 6/10/2019

Alert Code 1: Minor cracks in deck over both piers. Debris hanging from pier wall and abutment. Soffit has hairline cracking. 10/15 - NE abutment has some minor vertical cracking. Minor damage to metal bridge railing. Both joints are filled with gravel. - 6/10/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-142-21.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Minor Arterial
04 City	REED TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 10	102 Direction of Traffic	2 2-way traffic
09 Location	BTWN 40 AND 52 AVE N	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 49' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	665969.2 5201487.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2008 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 25, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	05/22/2013
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 11 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok, Maneval
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 10 X 13 X 112' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-142-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	224	62	138	38	86	0	0	0	0
Notes:_										
1080/3:Delamination/Spall/Patched Area	ft	20	0	0	100	20	0	0	0	0
1130/3:Cracking (RC and Other)	ft	30	0	0	100	30	0	0	0	0
1900/3:Distortion	ft	30	0	0	100	30	0	0	0	0
6000/3:Scour	ft	6	0	0	100	6	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/1:Settlement	each	2	0	0	100	2	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0

Remarks: Minor misalignment & spalls at joints. Chain link fences installed at ends, NE fence has fallen in.

Alert Code 1: Minor erosion at SW cor.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-142-36.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	STANLEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00950 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST OF ST BENEDICT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	19.796	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 49' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	666560.9 5176017.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 37 68 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2001 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	670 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	6.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	September 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	35.8 Ft.	Underwater	N
48 Length of Max Span	85 Ft.	Other Special	N
49 Structure Length	258.86 Ft.	218 Channel Profile	1 48 06/20/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/09/2018
	36.1 Ft.	213 Federal Aid Project Number	BRC-950(53)
52 Deck Width	38.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-142-36.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	9,967	99	9,867	1	100	0	0	0	0
1120/2:Efflorescence/Rust Staining	sq.ft	50	0	0	100	50	0	0	0	0
Notes:cracking with efflorescence on underside of deck - 9/25/2019										
1130/2:Cracking (RC and Other)	sq.ft	50	0	0	100	50	0	0	0	0
Notes:Random cracking throughout deck - 9/25/2019										
520/2:Conc Re Prot Sys	sq.ft	9,967	100	9,967	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	127	100	127	0	0	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	2	100	2	0	0	0	0	0	0
Notes:Center beam is showing efflorescence about 4" from the bottom in the center span. - 9/25/2019										
210/2:Re Conc Pier Wall	ft	79	98	77	3	2	0	0	0	0
1130/2:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
Notes:Cracks in concrete pier wall - 9/25/2019										
215/2:Re Conc Abutment	ft	82	99	81	1	1	0	0	0	0
1130/2:Cracking (RC and Other)	ft	1	0	0	100	1	0	0	0	0
Notes:1 crack counted in concrete pier wall - 9/25/2019										
301/1:Pourable Joint Seal	ft	72	0	0	0	0	100	72	0	0
2330/1:Seal Damage	ft	72	0	0	0	0	100	72	0	0
Notes:Joint seal is in poor condition - 9/25/2019										
321/2:Re Conc Approach Slab	sq.ft	999	98	979	2	20	0	0	0	0
1130/2:Cracking (RC and Other)	sq.ft	20	0	0	100	20	0	0	0	0
Notes:Random cracking in approach slabs - 9/25/2019										
331/2:Re Conc Bridge Railing	ft	518	86	447	14	71	0	0	0	0
1130/2:Cracking (RC and Other)	ft	71	0	0	100	71	0	0	0	0
Notes:Cracks counted in concrete bridge rail - 9/25/2019										
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
1130/2:Cracking (RC and Other)	each	2	100	2	0	0	0	0	0	0

Remarks: Center beam is showing efflorescence about 4" from the bottom in the center span. Cracking on concrete bridge railing. Scour around piers. Random deck cracking with soffit efflorescence visible. East end of bridge deck has cracking and minor spalling. Crack in se and ne wing wall. - 9/25/2019

Alert Code 1: SE bank is sliding.10/15 - East and West approach slabs are undermined the entire width of the approach slab. - 9/25/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-143-20.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	REED TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00031 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN # 10	102 Direction of Traffic	2 2-way traffic
09 Location	1.5 NORTH OF CO.HWY # 20	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 48' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	666946.0 5202543.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2008 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	9 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	40 Ft.	90 Date of Last Inspection	September 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	11389
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevold, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10'X 14'X 162' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-143-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	324	70	228	28	92	1	4	0	0
1080/1:Delamination/Spall/Patched Area	ft	4	0	0	0	0	100	4	0	0
Notes:Spalls with rebar exposed - 9/24/2019										
1900/1:Distortion	ft	92	0	0	100	92	0	0	0	0
Notes:Minor misalignment throughout structure - 9/24/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Drop structure on west end of structure. Chain link attached to both parapets & wings - wing attachments are broken off & spalled the concrete exposing steel. - 9/24/2019

Alert Code 1: Slight misalignment of sections. Lift holes not plugged. Splash pad on east has dropped & seperated allowing all water to flow underneath - app. 18" undermined below box floor. - 9/24/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-143-33.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	40.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	STANLEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTHEAST OF WILD RICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 45' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 48' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	667985.4 5180805.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 0 0 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 0 0 Tons
208 Dk Overburden	1 None	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	10 Tons
27 Yr Built	1959 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	0 Closed
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	18 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.3 Ft.	Underwater	N
48 Length of Max Span	30 Ft.	Other Special	N
49 Structure Length	83.01 Ft.	218 Channel Profile	1 48 06/12/2019
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevold, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-143-33.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	2,013	100	2,013	0	0	0	0	0	0
111/2:Timber Open Girder	ft	1,161	79	913	21	248	0	0	0	0
1150/2:Check/Shake	ft	248	0	0	100	248	0	0	0	0
202/3:Steel Column	each	2	0	0	100	2	0	0	0	0
1000/3:Corrosion	each	2	0	0	100	2	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
206/3:Timber Column	each	20	0	0	60	12	20	4	20	4
1170/3:Split/Delamination (Timber)	each	20	0	0	60	12	20	4	20	4
216/2:Timber Abutment	ft	52	0	0	50	26	0	0	50	26
4000/2:Settlement	ft	52	0	0	50	26	0	0	50	26
235/2:Timber Pier Cap	ft	105	0	0	51	53	50	52	0	0
1150/2:Check/Shake	ft	53	0	0	100	53	0	0	0	0
4000/2:Settlement	ft	52	0	0	0	0	100	52	0	0
332/1:Timb Bridge Railing	ft	167	100	167	0	0	0	0	0	0
4000/2:Settlement	each	1	0	0	0	0	0	0	100	1
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
4000/2:Settlement	each	4	0	0	100	4	0	0	0	0

Remarks: 6x12 yellow end markers on all four corners. Signed "Minimum Maintenance Road", "5 MPH", & "Private Drive" to the east. Posted for 4 tons/axle, 10 tons gross. 2.5"conduit attached to north side of superstructure. North curb has fire damage. New deck and rails. Sheet piling at SE corner. Numerous steel brackets installed to secure the abutment caps in place. 2/19: County has set Type III barricade w/ Road Closed sign along the east of the road to keep unnecessary traffic out while allowing access to the single residence west of the structure. 2/19: Installed poppies in abutment pile to monitor movement (measurements taken below the nails w/ 2' level). STRUCTURE HAS BEEN CLOSED BY CASS COUNTY. Cass County is working on buying property and if successful will then remove the structure. Cass County is planing on installing more permanent closure devices. - 9/26/2019

Alert Code 1: All piling have moderate splitting. Bottom of backwall exposed at west abutment. Wingwalls are leaning and have erosion behind them. Steel tie-rod between girders is bent in center span. Upper bolted x-brace connection at south end Pier 3 is loose. Pile #1 at west abutment is leaning 1-1/4" in 2'. Abut 1 leaning east (all measurements in 2'): 2/19: Pile 1=1-1/2", #4=2-1/8", #6=1-3/4". - 9/26/2019

Alert Code 2: Large splits in Abutment Pile #'s 1, 2, 4, & 5-east & Pile 5-west. Heavy debris against the north side of the structure is blocking the entire channel. - 9/26/2019

Alert Code 3: Both abutment caps have rotated and are 50% off of the piling. Abutment 4 is leaning west (all measurements in 2'): 9/12: Pile #1=3", Pile #6=3"; 2/14: Pile #1=1-5/8", Pile #3=1-3/4", Pile #6=1-3/8"; 12/14: Pile #1=3-3/4", Pile #6=4" (Embankment work behind abutment has been done since 2/14 inspection); 10/15: Pile #1=4", Pile #3=4", Pile #6=4-1/8"; 1/18: Same as 10/15 inspection. 2/19: #1=3", #3=4-1/8", #4=3-7/8", #6=4-7/8", wall=4-1/4". - 9/26/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-143-34.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	STANLEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00946 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF WILD RICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 44' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 48' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	666813.8 5179206.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 22 41 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	175 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	32 Ft.	90 Date of Last Inspection	September 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	32.2 Ft.	Underwater	N
48 Length of Max Span	80 Ft.	Other Special	N
49 Structure Length	241.14 Ft.	218 Channel Profile	1 48 06/12/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	02/21/1996
	32.5 Ft.	213 Federal Aid Project Number	BRO-9(12)
52 Deck Width	35.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 09-143-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	8,439	95	8,039	5	400	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	400	0	0	100	400	0	0	0	0
104/1:Pre Clsd Box Girder	ft	1,204	100	1,204	0	0	0	0	0	0
202/3:Steel Column	each	14	0	0	100	14	0	0	0	0
1000/3:Corrosion	each	14	0	0	100	14	0	0	0	0
Notes:Minor corrosion on steel columns - 9/26/2019										
515/3:Steel Protective Coating	sq.ft	999	0	0	0	0	100	999	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	100	999	0	0
Notes:Steel protective coating has limited effectiveness - 9/26/2019										
210/2:Re Conc Pier Wall	ft	69	100	69	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	69	99	68	1	1	0	0	0	0
1130/2:Cracking (RC and Other)	ft	1	0	0	100	1	0	0	0	0
Notes:Crack in beam seat 5 East abutment - 9/26/2019										
234/2:Re Conc Pier Cap	ft	138	100	138	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	482	82	395	18	87	0	0	0	0
1130/1:Cracking (RC and Other)	ft	87	0	0	100	87	0	0	0	0
Notes:Cracks counted in concrete bridge rail - 9/26/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Cracking at end of diaphragms above piers 2 & 3. Plywood form hanging in west span between south beams. Random deck cracking with soffit efflorescence visible. East approach has settled and has been patched with asphalt. East approach barrier has pulled away from bridge barrier 3". Pier piling are rusty. 10/15 - Beam seat at beam 4 west abutment has cracking. Cracking on concrete bridge railing. - 9/26/2019

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SEC 409

Structure Number: 09-143-34.2

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	STANLEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00957 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH .5 EAST WILD RICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.898	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 45' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 47' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	668128.4 5180228.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	5	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 36 66 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2000 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	1,628 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	8.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	40 Ft.	90 Date of Last Inspection	June 10, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	N
48 Length of Max Span	94 Ft.	Other Special	N
49 Structure Length	349.08 Ft.	218 Channel Profile	1 48 06/13/2019
50 Curb/Sidewalk Widths	6.2 Ft Rt-Side	Chaining Date	None
	6.2 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	40.0 Ft.	212 Structure Load Rated	03/09/2018
52 Deck Width	56.4 Ft.	213 Federal Aid Project Number	BRC-0957(54)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevoid, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 09-143-34.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	19,719	95	18,749	5	970	0	0	0	0
1080/2:Delamination/Spall/Patched Area	sq.ft	50	0	0	100	50	0	0	0	0
Notes:Spalling at barrier connections on underside of bridge - 6/10/2019										
1090/2:Exposed Rebar	sq.ft	20	0	0	100	20	0	0	0	0
Notes:Spalling with exposed rebar on underside of deck - 6/10/2019										
1120/2:Efflorescence/Rust Staining	sq.ft	700	0	0	100	700	0	0	0	0
Notes:Efflorescence at barrier connections - 6/10/2019										
1130/2:Cracking (RC and Other)	sq.ft	200	0	0	100	200	0	0	0	0
Notes:Random cracking throughout the deck - 6/10/2019										
520/2:Conc Re Prot Sys	sq.ft	19,719	100	19,699	0	20	0	0	0	0
3600/2:Eff - Protect Sys(e.g. cathodic)	sq.ft	20	0	0	100	20	0	0	0	0
Notes:Areas on underside of deck with spalling and exposed rebar - 6/10/2019										
104/2:Pre Clsd Box Girder	ft	2,444	100	2,444	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	98	100	98	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	115	97	112	3	3	0	0	0	0
1130/3:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
Notes:Cracks counted in concrete abutment - 6/10/2019										
234/2:Re Conc Pier Cap	ft	223	100	223	0	0	0	0	0	0
321/2:Re Conc Approach Slab	sq.ft	999	100	999	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	719	100	719	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	699	0	0	100	699	0	0	0	0
1130/2:Cracking (RC and Other)	ft	699	0	0	100	699	0	0	0	0
Notes:Jersey barriers are spalling and cracking at connection holes - 6/10/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8399/3:Slope Protection, RC	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Jersey barriers are spalling at connection holes. Random deck cracking with soffit efflorescence visible. Soffit efflorescence and minor spalling at barrier connections between Girders 1 and 2, and Girders 6 and 7. Rough approaches, approach slabs have settled. Soffit spalling with corroding rebar at air vents. 6' hairline crack on bottom of Girder 7 in Span 3 with efflorescence visible. Spall with exposed rebar and rust visible on underside of deck at east end of span 2. - 6/10/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-143-34.3

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Major Collector
04 City	STANLEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00946 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	EAST OF WILD RICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 44' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 48' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	667724.9 5179228.1	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2000 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	175 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	32 Ft.	90 Date of Last Inspection	September 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	36.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	03/14/2012
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 11 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevoid, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 8X9 AND 8X12		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 09-143-34.3

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	72	58	42	42	30	0	0	0	0
1130/1:Cracking (RC and Other)	ft	30	0	0	100	30	0	0	0	0
Notes:Random hairline cracking in box walls - 9/26/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Double B & A end markers at approach corners. Minor misalignment of precast barrel sections throughout structure. 10/15 - West box has exposed rebar. Hairline crack along the top in both boxes - 9/26/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-119-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Applicable	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Cass	26 Functional	Rural, Local
04 City	WALBURG TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 3 SOUTH OF CHAFFEE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	628300.5 5176618.8	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 20 36 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 20 36 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	9 Above Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	November 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	25.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	89 Ft.	Other Special	N
49 Structure Length	266.83 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.0 Ft.	213 Federal Aid Project Number	BRO-0009(051)
52 Deck Width	30.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 09-119-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	8,880	100	8,880	0	0	0	0	0	0
520/3:Conc Re Prot Sys	sq.ft	8,880	100	8,880	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	1,056	100	1,056	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	66	100	66	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	71	100	71	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	592	100	592	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: New structure in 2019 - 11/8/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: FRGO11 B

200 System Designation	4 - Urban	Classification	
201 Status		12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	-2.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Urban, Minor Arterial
04 City	FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	One Route Under	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08428 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	25TH STREET SOUTH	102 Direction of Traffic	2 2-way traffic
09 Location	25 ST. AT MAIN AVE. FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.180	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Unknown
16 Latitude	46d 52' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 49' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 666144.6 5193787.1		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	
Structure Type and Material		60 Substructure	
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	
Stringer		62 Culvert and Retaining Walls	
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	-1		Unknown
46 No. Approach Spans	-1	41 Structure Open, Closed or Posted	Unknown (NBI)
107 Deck Struct Type	Unknown (NBI)	63 Operating Rating Method	Unknown (NBI)
108 Wearing Surface	Unknown (NBI)	64 Oper. Rating	HS
Membrane	Unknown (NBI)	65 Inventory Rating Method	Unknown (NBI)
Dk Protect	Unknown (NBI)	66 Inv. Rating	HS
208 Dk Overburden 1	None	70 Bridge Posting	Unknown (NBI)
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built 1983 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	2 Railroad - On	67 Structural Condition	
	1 Highway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	5	69 Underclear. Vert & Horiz	3 Intolerable - Correct
29 ADT 18,900 30 Year of ADT 2010		71 Waterway Adequacy	
109 Average Daily Truck Traffic	3.00	72 App. Rdwy. Alignment	
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance	16 Ft. 3 In.	Inspections	
32 Approach Roadway Width	60 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	Unknown (NBI)	91 Designated Inspection Frequency	24 Months
34 Skew	-1.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	Unknown (NBI)	Fracture Critical	N
47 Total Horizontal Clearance	66.9 Ft.	Underwater	N
48 Length of Max Span	67 Ft.	Other Special	N
49 Structure Length	85.96 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	-1.0 Ft Rt-Side	Chaining Date	None
	-1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	-1.0 Ft.	213 Federal Aid Project Number	RRS-M-8-984(20)001
53 Min Vert Clear. Over Bridge	Ft. In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	16 Ft. 6 In.	216 Inspector	Kirkevoid, Finton
H Hwy beneath struct		Navigation Data	
55 Min Lateral UnderClear. - Rt	2.0 Ft.	38 Navigation Control	Unknown (NBI)
H Hwy beneath struct		39 Navigation Vertical Clearance	Ft.
56 Min Lateral UnderClear. - Lt	20.0 Ft.	40 Navigation Horizontal Clearance	Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: FRGO11 B

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
107/1:Steel Opn Girder/Beam	ft	699	39	274	59	415	1	10	0	0
1000/1:Corrosion	ft	425	0	0	98	415	2	10	0	0
Notes:Corrosion on bottom of girders, water leaking from deck has caused the top of girders to rust - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	999	90	900	10	99	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	99	0	0	100	99	0	0	0	0
Notes:Steel protective coating is substantially effective - 10/30/2019										
205/1:Re Conc Column	each	5	20	1	80	4	0	0	0	0
1130/1:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:Columns have cracking - 10/30/2019										
215/1:Re Conc Abutment	ft	75	87	65	13	10	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Spall in concrete abutment - 10/30/2019										
1130/1:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes:Cracks counted in concrete abutment - 10/30/2019										
234/1:Re Conc Pier Cap	ft	36	89	32	11	4	0	0	0	0
1130/1:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:Cracks counted in concrete pier cap - 10/30/2019										
311/1:Moveable Bearing	each	10	50	5	50	5	0	0	0	0
1000/1:Corrosion	each	5	0	0	100	5	0	0	0	0
Notes:Minor corrosion on bearings - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
313/1:Fixed Bearing	each	10	50	5	50	5	0	0	0	0
1000/1:Corrosion	each	5	0	0	100	5	0	0	0	0
Notes:Minor corrosion on bearings - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
8401/1:Wings	each	2	100	2	0	0	0	0	0	0

Remarks: CONCRETE PAVEMENT. SOME CRACKING IN PAVEMENT. INTERSECTION AND HORIZONTAL CURVES SOUTH. VERTICAL CURVES NORTH AND SOUTH. SIDEWALK AT BOTH ENDS HAS SETTLED. Steel has rust forming from where water is leaking from the deck - 10/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: FRGO22 B

200 System Designation	4 - Urban	Classification	
201 Status		12 Base Highway Network	On Base Network
202 Sufficiency Rating	-2.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	ban, Other Principal Arterial
04 City	FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	One Route Under	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08480 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	2ND. ST. N OF MAIN	102 Direction of Traffic	2 2-way traffic
09 Location	2ND ST N OF MAIN-FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.100	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute 0000000000 00		105 Federal Lands Highways	Unknown
16 Latitude	46d 52' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 47' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 669064.5 5193625.9		Condition	
98 Border Bridge Unknown (P) 0.00 %		58 Deck	Unknown (NBI)
99 Border Bridge Struct No. -		59 Superstructure	Unknown (NBI)
Structure Type and Material		60 Substructure	Unknown (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	Unknown (NBI)
Stringer		62 Culvert and Retaining Walls	Unknown (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	-1	41 Structure Open, Closed or Posted	Unknown (NBI)
46 No. Approach Spans	-1	63 Operating Rating Method	Unknown (NBI)
107 Deck Struct Type	Unknown (NBI)	64 Oper. Rating	HS Tons
108 Wearing Surface	Unknown (NBI)	65 Inventory Rating Method	Unknown (NBI)
Membrane	Unknown (NBI)	66 Inv. Rating	HS Tons
Dk Protect	Unknown (NBI)	70 Bridge Posting	Unknown (NBI)
208 Dk Overburden 1	None	209 Posted in "Tons"	Tons
Age and Service		Appraisal	
27 Yr Built 1974 106 Yr Reconstructed		67 Structural Condition	
42 Type of Service	2 Railroad - On	68 Deck Geometry	N Not applicable (NBI)
	1 Highway - Under	69 Underclear. Vert & Horiz	3 Intolerable - Correct
28 Lanes on Structure	4	71 Waterway Adequacy	Unknown (NBI)
29 ADT 13,100 30 Year of ADT 2010		72 App. Rdwy. Alignment	Unknown (NBI)
109 Average Daily Truck Traffic	2.00	36 Traffic Safety Features	
19 Bypass, Detour Length	2 Miles	113 Scour Critical	N Not Over Waterway
Geometric Data		Inspections	
10 Min Vert Clearance	14 Ft. 8 In.	90 Date of Last Inspection	October 09, 2019
32 Approach Roadway Width	51 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	Unknown (NBI)	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
34 Skew	-1.00	Fracture Critical	N
35 Structure Flared	Unknown (NBI)	Underwater	N
47 Total Horizontal Clearance	52.8 Ft.	Other Special	N
48 Length of Max Span	40 Ft.	218 Channel Profile	-1 01/01/1901
49 Structure Length	80.05 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	-1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	-1.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	-1.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	Ft. In.	216 Inspector	Kelsch
54 Min Vert Underclearance	14 Ft. 12 In.	Navigation Data	
H Hwy beneath struct		38 Navigation Control	Unknown (NBI)
55 Min Lateral UnderClear. - Rt	4.6 Ft.	39 Navigation Vertical Clearance	Ft.
H Hwy beneath struct		40 Navigation Horizontal Clearance	Ft.
56 Min Lateral UnderClear. - Lt	4.6 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: FRGO22 B

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
107/1:Steel Opn Girder/Beam	ft	1,040	0	0	100	1,040	0	0	0	0
Notes:Girders have minor corrosion - 10/9/2019										
1000/1:Corrosion	ft	1,040	0	0	100	1,040	0	0	0	0
Notes:Girders have minor corrosion - 10/9/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
3440/1:Eff (Stl Protect Coat)	sq.ft	999	0	0	0	0	0	0	100	999
Notes:paint system in not effective - 10/9/2019										
109/1:Pre Opn Conc Girder/Beam	ft	161	100	161	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	39	0	0	100	39	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes:Several shallow spalls in the pier wall - 10/9/2019										
1130/3:Cracking (RC and Other)	ft	15	0	0	100	15	0	0	0	0
Notes:Pier wall has cracks - 10/9/2019										
1190/3:Abrasion(PSC/RC)	ft	20	0	0	100	20	0	0	0	0
Notes:Pier wall has shallow abrasion several feet above grade - 10/9/2019										
215/3:Re Conc Abutment	ft	85	29	25	71	60	0	0	0	0
1130/3:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:Abutments have minor cracking - 10/9/2019										
1190/3:Abrasion(PSC/RC)	ft	50	0	0	100	50	0	0	0	0
Notes:Abutments have sections of minor abrasion several feet above grade - 10/9/2019										
8401/1:Wings	each	2	100	2	0	0	0	0	0	0

Remarks: South structure. Vertical & horizontal curves both directions. Roadways were rebuilt in 2001 with concrete.
Signed for 14'9" clearance & 25 mph for NB. - 10/9/2019

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SEC 409

Structure Number: FRGO23 B

200 System Designation	4 - Urban	Classification	
201 Status		12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	-2.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Urban, Minor Arterial
04 City	FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	One Route Under	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08480 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	2ND ST NO.(5TH AVE)	102 Direction of Traffic	2 2-way traffic
09 Location	2ND ST N(5TH AVE)-FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.620	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Unknown
16 Latitude	46d 52' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 47' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 669024.0 5194360.4		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	Unknown (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	Unknown (NBI)
Structure Type and Material		60 Substructure	Unknown (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	Unknown (NBI)
Stringer		62 Culvert and Retaining Walls	Unknown (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	-1		Unknown
46 No. Approach Spans	-1	41 Structure Open, Closed or Posted	Unknown (NBI)
107 Deck Struct Type	Unknown (NBI)	63 Operating Rating Method	Unknown (NBI)
108 Wearing Surface	Unknown (NBI)	64 Oper. Rating	HS
Membrane	Unknown (NBI)	65 Inventory Rating Method	Unknown (NBI)
Dk Protect	Unknown (NBI)	66 Inv. Rating	HS
208 Dk Overburden 1	None	70 Bridge Posting	Unknown (NBI)
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built 1965 106 Yr Reconstructed		Appraisal	
42 Type of Service	2 Railroad - On	67 Structural Condition	
	1 Highway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	4	69 Underclear. Vert & Horiz	3 Intolerable - Correct
29 ADT 14,800 30 Year of ADT 2010		71 Waterway Adequacy	Unknown (NBI)
109 Average Daily Truck Traffic	2.00	72 App. Rdwy. Alignment	Unknown (NBI)
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance	14 Ft. 8 In.	Inspections	
32 Approach Roadway Width	48 Ft.	90 Date of Last Inspection	October 29, 2019
33 Bridge Median	Unknown (NBI)	91 Designated Inspection Frequency	24 Months
34 Skew	-1.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
35 Structure Flared	Unknown (NBI)	Fracture Critical	N
47 Total Horizontal Clearance	48.9 Ft.	Underwater	N
48 Length of Max Span	51 Ft.	Other Special	N
49 Structure Length	50.85 Ft.	218 Channel Profile	— -1
50 Curb/Sidewalk Widths	-1.0 Ft Rt-Side	Chaining Date	01/01/1901
	-1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	None
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	-1.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	Ft. In.	216 Inspector	Kirkevold, Finton
54 Min Vert Underclearance	14 Ft. 8 In.	Navigation Data	
	H Hwy beneath struct	38 Navigation Control	Unknown (NBI)
55 Min Lateral UnderClear. - Rt	2.6 Ft.	39 Navigation Vertical Clearance	Ft.
	H Hwy beneath struct	40 Navigation Horizontal Clearance	Ft.
56 Min Lateral UnderClear. - Lt	2.6 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: FRGO23 B

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
107/1:Steel Opn Girder/Beam	ft	764	92	700	8	64	0	0	0	0
1000/1:Corrosion	ft	64	0	0	100	64	0	0	0	0
Notes:Minor corrosion on bottom of girders - 10/29/2019										
515/1:Steel Protective Coating	sq.ft	999	80	799	20	200	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	200	0	0	100	200	0	0	0	0
Notes:Steel protective coating is substantially effective on bottom of girders - 10/29/2019										
109/1:Pre Opn Conc Girder/Beam	ft	154	96	148	4	6	0	0	0	0
7362/1:Superstructure Traffic Impact	ft	6	0	0	100	6	0	0	0	0
Notes:Traffic impact damage to concrete beams - 10/29/2019										
205/1:Re Conc Column	each	7	57	4	43	3	0	0	0	0
7000/1:Damage	each	3	0	0	100	3	0	0	0	0
Notes:Traffic impact damage to concrete columns - 10/29/2019										
215/1:Re Conc Abutment	ft	59	66	39	34	20	0	0	0	0
1130/1:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
Notes:Cracks counted in concrete abutments - 10/29/2019										
234/1:Re Conc Pier Cap	ft	30	57	17	43	13	0	0	0	0
1130/1:Cracking (RC and Other)	ft	13	0	0	100	13	0	0	0	0
Notes:Cracking in concrete pier cap - 10/29/2019										
7362/1:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: PCC roadway underneath of the structure. Vertical curves both directions. 14' 2" clearance signs on bridge fascia beams. Sidewalk and lights on both sides but east sidewalk has no railing. - 10/29/2019

Alert Code 1: Minor impact damage to exterior girders at NB & SB driving lanes. Minor column spalling at rail attachments. - 10/29/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: FRGO25 B

200 System Designation	4 - Urban	Classification	
201 Status		12 Base Highway Network	On Base Network
202 Sufficiency Rating	94.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	ban, Other Principal Arterial
04 City	FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	One Route Under	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08480 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect 2ND ST NORTH OF MAIN		102 Direction of Traffic	2 2-way traffic
09 Location 2ND ST N OF MAIN-FARGO		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint 1.090		104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute 0000000000 00		105 Federal Lands Highways	Unknown
16 Latitude 46d 52' 29.00"		110 Designated National Network	0 Not part of natl netwo
17 Longitude 96d 46' 53.00"		112 NBIS Bridge Length	Yes
GPS Coordinates XY 669059.1 5193638.4		Condition	
98 Border Bridge Unknown (P) 0.00 %		58 Deck	6 Satisfactory
99 Border Bridge Struct No. -		59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type Steel		61 Chan. & Chan. Protection	N N/A (NBI)
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type Unknown (NBI)		Load Rating and Posting	
Unknown (P)		31 Design Load	Unknown
45 No. Spans in Main Unit			Unknown
46 No. Approach Spans		41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type 1 Concrete-Cast-in-Place		63 Operating Rating Method	Unknown (NBI)
108 Wearing Surface 6 Bituminous		64 Oper. Rating HS	Tons
Membrane Unknown (NBI)		65 Inventory Rating Method	Unknown (NBI)
Dk Protect Unknown (NBI)		66 Inv. Rating HS	Tons
208 Dk Overburden 35 Asphalt		70 Bridge Posting	Unknown (NBI)
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1970 106 Yr Reconstructed		Appraisal	
42 Type of Service 4 Highway-railroad - On		67 Structural Condition	9 Above Desirable Crit
1 Highway - Under		68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure 2		69 Underclear. Vert & Horiz	3 Intolerable - Correct
29 ADT 13,100 30 Year of ADT 2010		71 Waterway Adequacy	N Not applicable
109 Average Daily Truck Traffic 2.00		72 App. Rdwy. Alignment	Unknown (NBI)
19 Bypass, Detour Length 0 Miles		36 Traffic Safety Features	
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance 14 Ft. 4 In.		Inspections	
32 Approach Roadway Width 51 Ft.		90 Date of Last Inspection	June 10, 2019
33 Bridge Median Unknown (NBI)		91 Designated Inspection Frequency	24 Months
34 Skew		92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
35 Structure Flared Unknown (NBI)		Fracture Critical N	
47 Total Horizontal Clearance 52.8 Ft.		Underwater N	
48 Length of Max Span 40 Ft.		Other Special N	
49 Structure Length 80.00 Ft.		218 Channel Profile 0	
50 Curb/Sidewalk Widths Ft Rt-Side		Chaining Date	None
Ft Lt-Side		207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb 31.5 Ft.		212 Structure Load Rated	01/01/1901
52 Deck Width 39.0 Ft.		213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge Ft. In.		214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance 14 Ft. 12 In.		216 Inspector	Kelsch
H Hwy beneath struct		Navigation Data	
55 Min Lateral UnderClear. - Rt 4.6 Ft.		38 Navigation Control	Unknown (NBI)
H Hwy beneath struct		39 Navigation Vertical Clearance	Ft.
56 Min Lateral UnderClear. - Lt 4.6 Ft.		40 Navigation Horizontal Clearance	Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: FRGO25 B

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,120	100	3,120	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	3,120	90	2,800	7	215	3	105	0	0
3210/1:Del/Spall/Patch/Pot(Wear Sur	sq.ft	20	0	0	75	15	25	5	0	0
Notes:Potholes of varying depth throughout - 6/10/2019										
3220/1:Crack (Wearing Surface)	sq.ft	300	0	0	67	200	33	100	0	0
Notes:Cracks of varying width mainly along embedded rails - 6/10/2019										
107/1:Steel Opn Girder/Beam	ft	1,119	0	0	100	1,119	0	0	0	0
1000/1:Corrosion	ft	1,119	0	0	100	1,119	0	0	0	0
Notes:Girders have minor corrosion/pitting - 6/10/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	0	0	0	0	100	999
Notes:protective coating is non-existent - 6/10/2019										
109/1:Pre Opn Conc Girder/Beam	ft	161	95	153	5	8	0	0	0	0
1080/1:Delamination/Spall/Patched Are	ft	3	0	0	100	3	0	0	0	0
Notes:Several shallow spalls/scrapes in north girder over SB lane caused by traffic impact - 6/10/2019										
1110/1:Cracking (PSC)	ft	5	0	0	100	5	0	0	0	0
Notes:North fascia girder has a 5' long superficial crack over the NB lane. - 6/10/2019										
210/3:Re Conc Pier Wall	ft	39	44	17	49	19	8	3	0	0
1130/3:Cracking (RC and Other)	ft	7	0	0	57	4	43	3	0	0
Notes:Pier wall has several cracks, 3 of which are wider than the rest - 6/10/2019										
1190/3:Abrasion(PSC/RC)	ft	15	0	0	100	15	0	0	0	0
Notes:Shallow abrasion several feet above grade - 6/10/2019										
215/3:Re Conc Abutment	ft	85	60	51	40	34	0	0	0	0
1080/3:Delamination/Spall/Patched Are	ft	4	0	0	100	4	0	0	0	0
Notes:Shallow spall at the top of the west abutment below Girders 11 & 12 - 6/10/2019										
1130/3:Cracking (RC and Other)	ft	16	0	0	100	16	0	0	0	0
Notes:Minor abutment cracking - 6/10/2019										
1190/3:Abrasion(PSC/RC)	ft	14	0	0	100	14	0	0	0	0
Notes:Shallow abrasion extending several feet above grade - 6/10/2019										
330/1:Metal Bridge Railing	ft	160	100	160	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	160	59	94	41	66	0	0	0	0
1080/1:Delamination/Spall/Patched Are	ft	30	0	0	100	30	0	0	0	0
Notes:Small shallow spalls throughout the rail - 6/10/2019										
1130/1:Cracking (RC and Other)	ft	36	0	0	100	36	0	0	0	0
Notes:Minor cracking of concrete curbs - 6/10/2019										
8401/1:Wings	each	2	100	2	0	0	0	0	0	0

Remarks: North structure. Vertical & horizontal curves both directions. Roadways were rebuilt in 2001 with concrete. Signed for 147" clearance & directional panel signs over SB. Signs have minor collision damage. HBP paved on top of structure, no longer used as railroad bridge. Both abutment have conduits attached with lights. - 6/10/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: FRGO25 B

Alert Code 1: End of wing walls / retaining walls are spalled with corroded tie bars. Minor to moderate hairline cracks in substructures. Bird netting is torn and hanging over the NB lane. North concrete girder has 5' superficial hairline crack in the bottom of the girder over the NB driving lane. West abutment has a spall below Girders 11 & 12. - 6/10/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: FRGO32

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Urban, Minor Arterial
04 City	FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ROSE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location 40TH AVE SW-PRAIRIE ROSE		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 49' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 665494.3 5187231.3		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type 1 Concrete-Cast-in-Place		63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface 1 Monolithic Concrete		64 Oper. Rating HS 55	99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect 1 Epoxy Coated Reinforci		66 Inv. Rating HS 33	60 Tons
208 Dk Overburden 1	None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1995 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	3	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 550 30 Year of ADT 2019		71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	2.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	44 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	44.0 Ft.	Underwater	N
48 Length of Max Span	70 Ft.	Other Special	N
49 Structure Length	74.15 Ft.	218 Channel Profile	1 48
50 Curb/Sidewalk Widths	9.5 Ft Rt-Side	Chaining Date	07/12/2019
	5.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	None
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	-1
	44.0 Ft.	213 Federal Aid Project Number	01/01/1901
52 Deck Width	62.7 Ft.	214 Delayed Inspection	BRO-8-984(051)050
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.		Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: FRGO32

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	4,628	95	4,401	5	227	0	0	0	0
Notes:Shear & random cracked . - 10/30/2019										
1130/3:Cracking (RC and Other)	sq.ft	227	0	0	100	227	0	0	0	0
Notes:Shear cracked & others . - 10/30/2019										
520/3:Conc Re Prot Sys	sq.ft	430	100	430	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	666	100	666	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	125	96	120	4	5	0	0	0	0
Notes:Cracked & spalled . - 10/30/2019										
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:East abutment, beam # 5 from north . - 10/30/2019										
1130/2:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:Cracked counted on both abutments. - 10/30/2019										
301/1:Pourable Joint Seal	ft	88	0	0	0	0	100	88	0	0
Notes:Damaged. - 10/30/2019										
321/3:Re Conc Approach Slab	sq.ft	170	0	0	100	170	0	0	0	0
Notes:Settlement. - 10/30/2019										
4000/3:Settlement	sq.ft	170	0	0	100	170	0	0	0	0
Notes:Both approach slabs have settlement. - 10/30/2019										
330/1:Metal Bridge Railing	ft	141	100	141	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	148	72	106	28	42	0	0	0	0
Notes:Cracked. - 10/30/2019										
1130/3:Cracking (RC and Other)	ft	42	0	0	100	42	0	0	0	0
Notes:Cracked counted . - 10/30/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8399/2:Slope Protection, RC	each	1	0	0	100	1	0	0	0	0
Notes:Sliding to the channel. - 10/30/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Single B&A end markers on approach corners. West concrete slope protection is pulling away from west abutment, and has settled approx 2". Small trees growing in channel. North jersey barrier has been replaced approx 3' south of original location, and new section of deck where the original barrier was. - 10/30/2019

Alert Code 1: Approach slabs have settled. East abutment had spall under beam seat # 5. Minor random deck cracking with efflorescence visible. Beaver dam across the channel north of structure. - 10/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: FRGO33

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Urban, Minor Arterial
04 City	FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ROSE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	25TH ST SOUTH-FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 49' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 666396.5 5186449.3		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 18
208 Dk Overburden	1	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1989 106 Yr Reconstructed 1995		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 2,500 30 Year of ADT 2019		71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	2.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	50.9 Ft.	Underwater	N
48 Length of Max Span	80 Ft.	Other Special	N
49 Structure Length	83.99 Ft.	218 Channel Profile	1 48
50 Curb/Sidewalk Widths	5.9 Ft Rt-Side	Chaining Date	05/02/2017
	5.9 Ft Lt-Side	207 Transporter Erector Routes and Sites	None
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	50.9 Ft.	213 Federal Aid Project Number	BRO-8-984(051)050
52 Deck Width	66.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: FRGO33

Structure Number: FRGO33

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/4:Re Concrete Deck	sq.ft	5,565	96	5,315	5	250	0	0	0	0
Notes:Cracked . - 10/30/2019										
1120/4:Efflorescence/Rust Staining	sq.ft	50	0	0	100	50	0	0	0	0
Notes:Efflorescence showing . - 10/30/2019										
1130/4:Cracking (RC and Other)	sq.ft	200	0	0	100	200	0	0	0	0
Notes:Cracks counted . - 10/30/2019										
104/3:Pre Clsd Box Girder	ft	840	100	840	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	135	50	67	50	68	0	0	0	0
Notes:Cracked , south abutment has undermined / expose piling . - 10/30/2019										
1130/3:Cracking (RC and Other)	ft	1	0	0	100	1	0	0	0	0
Notes:Hair line cracked , south abutment . - 10/30/2019										
6000/3:Scour	ft	67	0	0	100	67	0	0	0	0
301/1:Pourable Joint Seal	ft	132	0	0	0	0	100	132	0	0
Notes:Both joints had failed . - 10/30/2019										
2330/1:Seal Damage	ft	132	0	0	0	0	100	132	0	0
Notes:Damaged seal . - 10/30/2019										
321/4:Re Conc Approach Slab	sq.ft	2,040	50	1,020	50	1,020	0	0	0	0
Notes:North approach had settled . - 10/30/2019										
4000/4:Settlement	sq.ft	1,020	0	0	100	1,020	0	0	0	0
Notes:North concrete approach slab had asphalt over laid . - 10/30/2019										
330/3:Metal Bridge Railing	ft	161	98	158	1	2	0	0	1	1
Notes:Loss connection , damaged . - 10/30/2019										
1020/3:Connection	ft	2	0	0	100	2	0	0	0	0
Notes:West fence post # 10 & # 11 has loss connection. - 10/30/2019										
7000/3:Damage	ft	1	0	0	0	0	0	0	100	1
Notes:East rail post has traffic impact damaged . - 10/30/2019										
515/3:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
331/4:Re Conc Bridge Railing	ft	167	74	124	26	43	0	0	0	0
Notes:Rebar exposed , spalled & cracked . - 10/30/2019										
1080/4:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Spalled on barrier rail . - 10/30/2019										
1090/4:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:Traffic impacted has exposed rebar . - 10/30/2019										
1130/4:Cracking (RC and Other)	ft	40	0	0	100	40	0	0	0	0
Notes:Hair lines cracks counted . - 10/30/2019										
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
Notes:south rip rap had settled. - 10/30/2019										
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:South slope protection has settling , piling exposed . - 10/30/2019										

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SEC 409

Structure Number: FRGO33

8399/2:Slope Protection, RC	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Concrete slope protection has settled, and pulled away approx 4" from north abutment. East railing post # 5 for metal rail is broken out of concrete rail, and concrete rail had rebar exposed /spalled ; west fence post # 10 & # 11 lost connection . Single B&A end markers at NW and NE corners. - 10/30/2019

Alert Code 1: Pile exposed at south abutment. Minor random deck cracking with soffit efflorescence visible. Both pourable joint has failed , North app slab has asphalt over lay and both approach slab has settle. - 10/30/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: FRGO34 B

200 System Designation	4 - Urban	Classification	
201 Status		12 Base Highway Network	On Base Network
202 Sufficiency Rating	-2.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	ban, Other Principal Arterial
04 City	FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	One Route Under	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08404 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BNSF RR UNDERPASS	102 Direction of Traffic	2 2-way traffic
09 Location	45 ST. AT MAIN AVE FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.850	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	0000000000 00	105 Federal Lands Highways	Unknown
16 Latitude	48d 52' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 51' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	662931.5 5193975.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	
Structure Type and Material		60 Substructure	
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	
Stringer		62 Culvert and Retaining Walls	
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	-1		Unknown
46 No. Approach Spans	-1	41 Structure Open, Closed or Posted	Unknown (NBI)
107 Deck Struct Type	Unknown (NBI)	63 Operating Rating Method	Unknown (NBI)
108 Wearing Surface	Unknown (NBI)	64 Oper. Rating	HS Tons
Membrane	Unknown (NBI)	65 Inventory Rating Method	Unknown (NBI)
Dk Protect	Unknown (NBI)	66 Inv. Rating	HS Tons
208 Dk Overburden 1	None	70 Bridge Posting	Unknown (NBI)
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built 1997 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	2 Railroad - On	67 Structural Condition	
	1 Highway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	4	69 Underclear. Vert & Horiz	3 Intolerable - Correct
29 ADT 12,300 30 Year of ADT	2010	71 Waterway Adequacy	
109 Average Daily Truck Traffic	3.00	72 App. Rdwy. Alignment	
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance	16 Ft. 6 In.	Inspections	
32 Approach Roadway Width	54 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	Unknown (NBI)	91 Designated Inspection Frequency	24 Months
34 Skew	-1.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
35 Structure Flared	Unknown (NBI)	Fracture Critical	N
47 Total Horizontal Clearance	64.0 Ft.	Underwater	N
48 Length of Max Span	64 Ft.	Other Special	N
49 Structure Length	70.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	-1.0 Ft Rt-Side	Chaining Date	None
	-1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	SU-8-984(059)058
52 Deck Width	-1.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	Ft. In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	16 Ft. 6 In.	Navigation Data	
	H Hwy beneath struct	38 Navigation Control	Unknown (NBI)
55 Min Lateral UnderClear. - Rt	2.0 Ft.	39 Navigation Vertical Clearance	Ft.
	H Hwy beneath struct	40 Navigation Horizontal Clearance	Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: FRGO34 B

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
107/1:Steel Opn Girder/Beam	ft	676	56	376	44	300	0	0	0	0
1000/1:Corrosion	ft	300	0	0	100	300	0	0	0	0
Notes:Minor corrosion on girders - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	999	56	560	44	439	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	439	0	0	100	439	0	0	0	0
Notes:Steel protective coating is substantially effective - 10/30/2019										
205/1:Re Conc Column	each	5	80	4	20	1	0	0	0	0
1130/1:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:Cracking on south concrete column - 10/30/2019										
210/1:Re Conc Pier Wall	ft	39	90	35	10	4	0	0	0	0
1130/1:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:Cracking in concrete pier wall - 10/30/2019										
215/1:Re Conc Abutment	ft	75	89	67	11	8	0	0	0	0
1130/1:Cracking (RC and Other)	ft	8	0	0	100	8	0	0	0	0
Notes:Cracks counted in concrete abutment - 10/30/2019										
234/1:Re Conc Pier Cap	ft	39	90	35	10	4	0	0	0	0
1130/1:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:Random cracking throughout pier cap - 10/30/2019										
313/1:Fixed Bearing	each	20	100	20	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0

Remarks: Some cracking in concrete pavement. Intersection and horizontal curves south. Vertical curves north and south. Sidewalk at both ends has settled. Steel has rust forming from water leaking from deck - 10/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: FRGO35

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Urban, Local
04 City	FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	40TH AVE SW	102 Direction of Traffic	2 2-way traffic
09 Location 40TH AVE-38TH ST SW-FARGO		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 50' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 664738.8 5187244.6		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type :stressed concrete continuous		61 Chan. & Chan. Protection	N N/A (NBI)
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type 1 Concrete-Cast-in-Place		63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface 1 Monolithic Concrete		64 Oper. Rating HS 55	99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect 1 Epoxy Coated Reinforci		66 Inv. Rating HS 27	49 Tons
208 Dk Overburden 1	None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 2000 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	1 Highway - Under	68 Deck Geometry	8 Desirable Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	6 Equal Minimum
29 ADT 650 30 Year of ADT 2019		71 Waterway Adequacy	N Not applicable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	0 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	N
48 Length of Max Span	61 Ft.	Other Special	N
49 Structure Length	172.90 Ft.	218 Channel Profile	— -1 01/01/1901
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	40.0 Ft.	213 Federal Aid Project Number	SU-8-984(083)086
52 Deck Width	42.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen
54 Min Vert Underclearance	15 Ft. 6 In.	Navigation Data	
	H Hwy beneath struct	38 Navigation Control	NA-no waterway
55 Min Lateral UnderClear. - Rt	10.5 Ft.	39 Navigation Vertical Clearance	0 Ft.
	H Hwy beneath struct	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	7,352	97	7,120	2	152	1	80	0	0
Notes:Cracked & efflorescences. Both repaired nosing have damaged. - 10/30/2019										
1120/3:Efflorescence/Rust Staining	sq.ft	52	0	0	100	52	0	0	0	0
Notes:Underside deck showing. - 10/30/2019										
1130/3:Cracking (RC and Other)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Random cracked on bridge deck . - 10/30/2019										
7000/3:Damage	sq.ft	80	0	0	0	0	100	80	0	0
Notes:Both nosing repaired have broken off . - 10/30/2019										
520/3:Conc Re Prot Sys	sq.ft	683	78	531	22	152	0	0	0	0
Notes:Cracked. - 10/30/2019										
3600/3:Eff - Protect Sys(e.g. cathodic	sq.ft	152	0	0	100	152	0	0	0	0
Notes:Not fully protectiveness on cracked areas . - 10/30/2019										
104/2:Pre Clsd Box Girder	ft	840	100	840	0	0	0	0	0	0
205/2:Re Conc Column	each	6	100	6	0	0	0	0	0	0
Notes:Bent # 2 column # 1 has rust stained , all other have several pop out . - 10/30/2019										
215/2:Re Conc Abutment	ft	89	97	86	3	3	0	0	0	0
Notes:Hair line cracked . - 10/30/2019										
1130/2:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
Notes:N abutment , beam #3 . S abutment beam # 1 & # 3. - 10/30/2019										
234/2:Re Conc Pier Cap	ft	79	100	79	0	0	0	0	0	0
Notes:No defect found. - 10/30/2019										
301/1:Pourable Joint Seal	ft	80	0	0	0	0	100	80	0	0
Notes:Joints have failed. - 10/30/2019										
7000/1:Damage	ft	80	0	0	0	0	100	80	0	0
Notes:Damaged. - 10/30/2019										
321/3:Re Conc Approach Slab	sq.ft	1,600	50	800	50	800	0	0	0	0
Notes:Cracked , undermined/settlement on both approach slabs. - 10/30/2019										
1130/3:Cracking (RC and Other)	sq.ft	400	0	0	100	400	0	0	0	0
Notes:Both approach slabs have cracked . - 10/30/2019										
4000/3:Settlement	sq.ft	400	0	0	100	400	0	0	0	0
Notes:Both approach slabs have minor undermined / settlement. - 10/30/2019										
331/3:Re Conc Bridge Railing	ft	256	54	139	46	117	0	0	0	0
Notes:Cracked & rust stained. - 10/30/2019										
1120/3:Efflorescence/Rust Staining	ft	1	0	0	100	1	0	0	0	0
Notes:East barrier railing has rust staining. - 10/30/2019										
1130/3:Cracking (RC and Other)	ft	116	0	0	100	116	0	0	0	0
Notes:Hair lines cracked . - 10/30/2019										
8399/2:Slope Protection, RC	each	4	0	0	100	4	0	0	0	0
Notes:Cracked & settlement. - 10/30/2019										

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Structure Number: FRGO35

1130/2:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
Notes:Slopes protection havecracked . - 10/30/2019										
4000/2:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Minor settlement on slope protection. - 10/30/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Alert Code 1: Minor deck cracking - some soffit efflorescence visible. Slope protection cracking and dropping. Minor spalling of backwalls at beam seats at both abutments. - 10/30/2019

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Structure Number: FRGO36

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Urban, Local
04 City	FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ROSE COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	NORTH OF 40TH AVE SW	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 50' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 664726.8 5187460.5		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 37
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 22
208 Dk Overburden 1	None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 2011 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 1,470 30 Year of ADT 2019		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	2.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	40.0 Ft.	Underwater	N
48 Length of Max Span	33 Ft.	Other Special	N
49 Structure Length	98.00 Ft.	218 Channel Profile	Y -1
50 Curb/Sidewalk Widths	1.2 Ft Rt-Side	Chaining Date	None
	1.2 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	40.0 Ft.	212 Structure Load Rated	11/20/2014
52 Deck Width	42.5 Ft.	213 Federal Aid Project Number	STM-SU-8-984(113)116
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: FRGO36

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
38/1:Re Concrete Slab	sq.ft	4,165	98	4,070	2	95	0	0	0	0
Notes:Efflorescences & cracked . - 10/30/2019										
1120/1:Efflorescence/Rust Staining	sq.ft	35	0	0	100	35	0	0	0	0
Notes:Efflorescences had showing. - 10/30/2019										
1130/1:Cracking (RC and Other)	sq.ft	60	0	0	100	60	0	0	0	0
Notes:Hair line cracked . - 10/30/2019										
520/1:Conc Re Prot Sys	sq.ft	387	76	292	25	95	0	0	0	0
Notes:Not fully protect at cracked areas . - 10/30/2019										
104/1:Pre Clsd Box Girder	ft	490	100	490	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	80	100	80	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	85	95	81	5	4	0	0	0	0
Notes:Hair lines cracked . - 10/30/2019										
1130/1:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:North abutment = 1 ea South abutment = 3 ea. - 10/30/2019										
321/1:Re Conc Approach Slab	sq.ft	1,600	94	1,500	6	100	0	0	0	0
Notes:Undermined. - 10/30/2019										
4000/1:Settlement	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Both approach slabs had slightly undermined / settlement . - 10/30/2019										
331/1:Re Conc Bridge Railing	ft	196	66	130	34	66	0	0	0	0
Notes:On both barrier railings have cracked . - 10/30/2019										
1130/1:Cracking (RC and Other)	ft	66	0	0	100	66	0	0	0	0
Notes:Cracked . - 10/30/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Rip rap across channel. - 10/30/2019**Alert Code 1:** Minor efflorescence showing on soffit. Both approach slabs have cracking. Both approach slabs had undermined. Both abutments had hair line cracked . - 10/30/2019

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SEC 409

Structure Number: FRGO37

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Urban, Minor Arterial
04 City	FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 27	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF I-29	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 52' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	662330.5 5187189.2	Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type stressed concrete continuous		61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 55
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	8 Unknown	66 Inv. Rating	HS 39
Dk Protect	1 Epoxy Coated Reinforci	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	2006 106 Yr Reconstructed	-1	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	4	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	2,100 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	3.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	44 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	71.9 Ft.	Underwater	N
48 Length of Max Span	41 Ft.	Other Special	N
49 Structure Length	124.02 Ft.	218 Channel Profile	1 48
50 Curb/Sidewalk Widths	6.6 Ft Rt-Side	Chaining Date	05/02/2017
	10.8 Ft Lt-Side	207 Transporter Erector Routes and Sites	None
51 Bridge Rdwy Width - Curb to Curb	71.9 Ft.	212 Structure Load Rated	-1
52 Deck Width	91.9 Ft.	213 Federal Aid Project Number	01/01/1901
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevoid, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: FRGO37

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	11,409	99	11,295	1	114	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	114	0	0	100	114	0	0	0	0
Notes:Random cracking throughout deck - 10/7/2019										
520/1:Conc Re Prot Sys	sq.ft	11,409	100	11,409	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	1,098	100	1,098	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	180	100	180	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	189	100	189	0	0	0	0	0	0
321/1:Re Conc Approach Slab	sq.ft	3,140	100	3,140	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	20	100	20	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	496	75	372	25	124	0	0	0	0
1000/1:Corrosion	ft	124	0	0	100	124	0	0	0	0
Notes:Minor corrosion on metal bridge rail - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	999	50	500	50	499	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	499	0	0	100	499	0	0	0	0
Notes:Steel protective coating is substantially effective - 10/7/2019										
331/1:Re Conc Bridge Railing	ft	248	81	200	19	48	0	0	0	0
1130/1:Cracking (RC and Other)	ft	48	0	0	100	48	0	0	0	0
Notes:Cracks counted in concrete bridge rail - 10/7/2019										
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8399/1:Slope Protection, RC	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 18 ft. wide median island. Minor random deck cracking with soffit effloresence visible. Cracks in slope protection. All lights attached to Pier 1 are broken. Guardrail end are damaged from traffic impacts. - 10/7/2019

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SEC 409

Structure Number: FRGO38

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Urban, Minor Arterial
04 City	FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 27	102 Direction of Traffic	2 2-way traffic
09 Location	0.5 MILE WEST OF 45TH ST.	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 52' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 662352.3 5186675.5		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type stressed concrete continuous		61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type 1 Concrete-Cast-in-Place		63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface 1 Monolithic Concrete		64 Oper. Rating HS 55	99 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect 1 Epoxy Coated Reinforci		66 Inv. Rating HS 36	66 Tons
208 Dk Overburden 1	None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 2006 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	8 Desirable Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 1,000 30 Year of ADT 2019		71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	40 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	N
48 Length of Max Span	46 Ft.	Other Special	N
49 Structure Length	140.09 Ft.	218 Channel Profile	1 48
50 Curb/Sidewalk Widths	12.1 Ft Rt-Side	Chaining Date	07/12/2019
	7.9 Ft Lt-Side	207 Transporter Erector Routes and Sites	None
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	-1
	40.0 Ft.	213 Federal Aid Project Number	01/01/1901
52 Deck Width	60.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: FRGO38

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	8,400	100	8,365	0	35	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	5	0	0	100	5	0	0	0	0
Notes:Cracking with efflorescence on underside of deck - 10/7/2019										
1130/1:Cracking (RC and Other)	sq.ft	30	0	0	100	30	0	0	0	0
Notes:Random cracking throughout deck. - 10/7/2019										
520/1:Conc Re Prot Sys	sq.ft	780	100	780	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	966	100	966	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	117	100	117	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	128	94	120	6	8	0	0	0	0
1130/1:Cracking (RC and Other)	ft	8	0	0	100	8	0	0	0	0
Notes:Cracks counted in concrete abutments - 10/7/2019										
321/3:Re Conc Approach Slab	sq.ft	80	85	68	15	12	0	0	0	0
1080/3:Delamination/Spall/Patched Area	sq.ft	2	0	0	100	2	0	0	0	0
Notes:Minor spalls on East approach slab - 10/7/2019										
1130/3:Cracking (RC and Other)	sq.ft	10	0	0	100	10	0	0	0	0
Notes:Random cracking throughout approach slabs - 10/7/2019										
330/1:Metal Bridge Railing	ft	280	100	280	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	999	100	999	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	280	90	251	10	29	0	0	0	0
1130/1:Cracking (RC and Other)	ft	29	0	0	100	29	0	0	0	0
Notes:Cracks counted in concrete bridge rail - 10/7/2019										
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8399/1:Slope Protection, RC	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B and A end markers at all corners. Sidewalks on North and South side. - 10/7/2019

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SEC 409

Structure Number: FRGO39

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Rural, Local
04 City	FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CASS COUNTY DRAIN 27	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 4 NORTH OF HORACE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	663134.5 5187417.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 49 89 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 23 42 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1999 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	2,000 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 31, 2019
33 Bridge Median	2 Closed Med w/o Barrier	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	65.9 Ft.	Underwater	N
48 Length of Max Span	36 Ft.	Other Special	N
49 Structure Length	116.14 Ft.	218 Channel Profile	1 48 07/12/2019
50 Curb/Sidewalk Widths	9.8 Ft Rt-Side	Chaining Date	None
	5.9 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	65.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	104.0 Ft.	213 Federal Aid Project Number	BRO-9(21)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: FRGO39

Structure Number: FRGO39

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	9,914	95	9,404	5	502	0	8	0	0
Notes:Spalls , efflorescences & cracks - 10/31/2019										
1080/1:Delamination/Spall/Patched Area	sq.ft	14	0	0	43	6	57	8	0	0
Notes:Spalled (6) . ground deck (8) . - 10/31/2019										
1120/1:Efflorescence/Rust Staining	sq.ft	196	0	0	100	196	0	0	0	0
Notes:Efflorescences showing . - 10/31/2019										
1130/1:Cracking (RC and Other)	sq.ft	300	0	0	100	300	0	0	0	0
Notes:Random cracked on deck . - 10/31/2019										
104/2:Pre Cld Box Girder	ft	1,396	100	1,396	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	171	92	157	8	14	0	0	0	0
Notes:Cracked - 10/31/2019										
1130/3:Cracking (RC and Other)	ft	14	0	0	100	14	0	0	0	0
Notes:Pier wall # 2 = 5 ea . Pier wall # 3 = 9 ea . - 10/31/2019										
215/2:Re Conc Abutment	ft	177	99	176	1	1	0	0	0	0
Notes:Spalled . - 10/31/2019										
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Beam seat # 3 / north abutment . - 10/31/2019										
301/1:Pourable Joint Seal	ft	136	0	0	100	136	0	0	0	0
Notes:Both pourable joint seal has failed . - 10/31/2019										
321/1:Re Conc Approach Slab	sq.ft	236	0	0	100	236	0	0	0	0
Notes:Cracked Settled . - 10/31/2019										
1130/1:Cracking (RC and Other)	sq.ft	136	0	0	100	136	0	0	0	0
Notes:Both approach slabs have cracked . - 10/31/2019										
4000/1:Settlement	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Minor settling on both approaches . - 10/31/2019										
330/1:Metal Bridge Railing	ft	234	30	71	48	113	13	30	9	20
Notes:Protective coating paint had peeled , rusted & chalkinh app ; - 10/31/2019										
1000/1:Corrosion	ft	234	30	71	48	113	13	30	9	20
Notes:Corrosion & peeled . - 10/31/2019										
515/1:Steel Protective Coating	sq.ft	999	50	500	45	449	3	30	2	20
Notes:Corrosion , peeled & chalking appearance . - 10/31/2019										
3420/1:Peel/Bub/Crack/Stl Protect Co	sq.ft	499	0	0	90	449	6	30	4	20
Notes:Corrosion , peeled & Chalking . - 10/31/2019										
331/1:Re Conc Bridge Railing	ft	233	40	93	60	140	0	0	0	0
Notes:Damaged , cracked . - 10/31/2019										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
Notes:Rip rap sliding to pier walls . - 10/31/2019										
8399/2:Slope Protection, RC	each	1	0	0	100	1	0	0	0	0
Notes:Crcaked & settled . - 10/31/2019										

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SEC 409

Structure Number: FRGO39

8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: N slope prot dropped 2 inches. Bike path under north end of structure. This county bridge 9-140-29.1 was changed to FRGO39. SW pedestrian railing has traffic impacted , S pan # 3 , underside deck has a steel plate between beam # 3 & # 4 . North end of deck was ground (1 ' x 8 ' x 2") to flush up the east walkway due to settlement of the abutting sidewalk. - 10/31/2019

Alert Code 1: Some cracking and effloresence on bottom of deck. East barrier railing has spalled damaged & # 14 rail post has damaged . Both joint have broken seals , approach slabs had cracked & settled . - 10/31/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: FRGO40

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Urban, Minor Arterial
04 City	FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN 27	102 Direction of Traffic	2 2-way traffic
09 Location	0.5 MILE WEST OF I-29	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 52' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	661443.9 5190216.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 36 66 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	0 Tons
27 Yr Built	2001 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	1,000 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	40 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	64.0 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	127.95 Ft.	218 Channel Profile	1 48 07/12/2019
50 Curb/Sidewalk Widths	6.9 Ft Rt-Side	Chaining Date	None
	10.8 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	64.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	84.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: FRGO40

Structure Number: FRGO40

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	10,750	90	9,673	10	1,027	1	50	0	0
Notes:Cracked , spalled & rebar exposed . - 10/30/2019										
1080/1:Delamination/Spall/Patched Area	sq.ft	50	0	0	0	0	100	50	0	0
Notes:Deck nosing , south repaired nosing = 10 SQ ft , North repaired nosing = 40 SQ ft . - 10/30/2019										
1090/1:Exposed Rebar	sq.ft	2	0	0	100	2	0	0	0	0
Notes:East rail post base # 12 - 10/30/2019										
1130/1:Cracking (RC and Other)	sq.ft	1,025	0	0	100	1,025	0	0	0	0
Notes:Hair lines cracked . - 10/30/2019										
520/1:Conc Re Prot Sys	sq.ft	999	100	999	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	1,152	100	1,152	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	164	89	146	11	18	0	0	0	0
Notes:Cracked. - 10/30/2019										
1130/1:Cracking (RC and Other)	ft	18	0	0	100	18	0	0	0	0
Notes:Pier wall # 2 = 8 ea. Pier wall # 3 = 10 ea. - 10/30/2019										
215/1:Re Conc Abutment	ft	169	99	167	1	2	0	0	0	0
Notes:Cracked . - 10/30/2019										
1130/1:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
Notes:Hair line cracked . - 10/30/2019										
301/1:Pourable Joint Seal	ft	168	50	84	50	84	0	0	0	0
Notes:Both joints had leakage . - 10/30/2019										
321/4:Re Conc Approach Slab	sq.ft	2,560	0	0	100	2,560	0	0	0	0
Notes:Cracks & settlements. - 10/30/2019										
1130/4:Cracking (RC and Other)	sq.ft	1,280	0	0	100	1,280	0	0	0	0
Notes:Both have cracked. - 10/30/2019										
4000/4:Settlement	sq.ft	1,280	0	0	100	1,280	0	0	0	0
Notes:Minor settlement on both approach slabs . - 10/30/2019										
330/1:Metal Bridge Railing	ft	999	74	743	0	0	26	256	0	0
Notes:Erosion & peeled . - 10/30/2019										
1000/1:Corrosion	ft	256	0	0	0	0	100	256	0	0
Notes:Corrosion damaged . - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	999	0	0	74	743	26	256	0	0
Notes:Corrosion & peeled . - 10/30/2019										
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	743	0	0	100	743	0	0	0	0
Notes:Carrosion damaged , peeled paint , - 10/30/2019										
331/1:Re Conc Bridge Railing	ft	256	67	172	33	84	0	0	0	0
Notes:Cracked . - 10/30/2019										
1130/1:Cracking (RC and Other)	ft	84	0	0	100	84	0	0	0	0
Notes:Totals cracks counted. - 10/30/2019										
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0

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Structure Number: FRGO40

Notes:Movement. - 10/30/2019										
2210/1:Movement	each	2	0	0	100	2	0	0	0	0
Notes:Both slope protection have sliding against the piers . - 10/30/2019										

Remarks: Metal rails have section loss by corrosion, paint peeled.East Rail post # 14 has missing bolted . - 10/30/2019

Alert Code 1: Nosing concrete is cracked and broken up in sections. Random deck cracking with soffit efflorescence visible.
Approach slabs have settled, hair line cracked on both abutments & piers . Rip rap sliding . - 10/30/2019

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SEC 409

Structure Number: FRGO41 L

200 System Designation	4 - Urban	Classification	
201 Status	Not Applicable	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Rural, Major Collector
04 City	BARNES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00944 0 N/A (NBI)	101 Parallel Structure Designation	Right of bridge
06 Feats Intersect	COUNTY DRAIN 27	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 3 NORTH OF HORACE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	29.494	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 52' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	662410.1 5185567.5	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	—	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	11,840 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	4.00	72 App. Rdwy. Alignment	9 Above Desirable Crit
19 Bypass, Detour Length	0 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	37 Ft.	90 Date of Last Inspection	November 13, 2019
33 Bridge Median	1 Open median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	32.0 Ft.	Underwater	N
48 Length of Max Span	54 Ft.	Other Special	N
49 Structure Length	165.33 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	11.8 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/04/1996
	32.0 Ft.	213 Federal Aid Project Number	SU-8-984(164)
52 Deck Width	45.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	0 Ft.

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SEC 409

Structure Number: FRGO41 L

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	7,620	100	7,620	0	0	0	0	0	0
520/3:Conc Re Prot Sys	sq.ft	7,620	100	7,620	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	822	100	822	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	94	100	94	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	98	100	98	0	0	0	0	0	0
301/3:Pourable Joint Seal	ft	90	100	90	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	339	100	339	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	339	100	339	0	0	0	0	0	0
520/3:Conc Re Prot Sys	sq.ft	339	100	339	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: New structure in 2019, which replaces 09-140-30.0. - 11/13/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: FRGO41 R

200 System Designation	4 - Urban	Classification	
201 Status	Not Applicable	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Rural, Major Collector
04 City	BARNES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00944 0 N/A (NBI)	101 Parallel Structure Designation	Left of bridge
06 Feats Intersect	COUNTY DRAIN 27	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 3 NORTH OF HORACE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	29.494	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 52' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	662410.1 5185567.5	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	—	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	11,840 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	4.00	72 App. Rdwy. Alignment	9 Above Desirable Crit
19 Bypass, Detour Length	0 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	37 Ft.	90 Date of Last Inspection	November 13, 2019
33 Bridge Median	1 Open median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	32.0 Ft.	Underwater	N
48 Length of Max Span	54 Ft.	Other Special	N
49 Structure Length	165.33 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	11.8 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/04/1996
	32.0 Ft.	213 Federal Aid Project Number	SU-8-984(164)
52 Deck Width	45.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevold, Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	0 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: FRGO41 R

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	7,620	100	7,620	0	0	0	0	0	0
520/3:Conc Re Prot Sys	sq.ft	7,620	100	7,620	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	822	100	822	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	94	100	94	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	98	100	98	0	0	0	0	0	0
301/3:Pourable Joint Seal	ft	90	100	90	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	339	100	339	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	339	100	339	0	0	0	0	0	0
520/3:Conc Re Prot Sys	sq.ft	339	100	339	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: New structure in 2019 which replaces 09-140-30.0. - 11/13/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WF01

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Urban, Local
04 City	WEST FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect CASS COUNTY DRAIN 21		102 Direction of Traffic	2 2-way traffic
09 Location 19TH AVE NW - WEST FARGO		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint 0.000		104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute -1 -1		105 Federal Lands Highways	Not applicable
16 Latitude 46d 54' 24.00"		110 Designated National Network	0 Not part of natl netwo
17 Longitude 96d 52' 06.00"		112 NBIS Bridge Length	Yes
GPS Coordinates XY 658429.2 5196805.5		Condition	
98 Border Bridge Unknown (P) 0.00 %		58 Deck	N N/A (NBI)
99 Border Bridge Struct No. -		59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type Concrete		61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type Unknown (NBI)		Load Rating and Posting	
Unknown (P)		31 Design Load	
45 No. Spans in Main Unit 3		22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans 0		41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type N N/A (NBI)		63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface N N/A (no deck (NBI))		64 Oper. Rating HS 41	74 Tons
Membrane N N/A (no deck (NBI))		65 Inventory Rating Method	1 LF Load Factor
Dk Protect N N/A (no deck (NBI))		66 Inv. Rating HS 24	45 Tons
208 Dk Overburden N Not Applicable		70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 2000 106 Yr Reconstructed -1		Appraisal	
42 Type of Service 1 Highway - On		67 Structural Condition	7 Above Min Criteria
5 Waterway - Under		68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure 2		69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 500 30 Year of ADT 2017		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic 5.00		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length 2 Miles		36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance 99 Ft. 12 In.		Inspections	
32 Approach Roadway Width 20 Ft.		90 Date of Last Inspection	November 20, 2017
33 Bridge Median 0 No median		91 Designated Inspection Frequency	48 Months
34 Skew 0.00		92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared 0 No flare		Fracture Critical N	
47 Total Horizontal Clearance 27.9 Ft.		Underwater N	
48 Length of Max Span 14 Ft.		Other Special N	
49 Structure Length 46.92 Ft.		218 Channel Profile N	
50 Curb/Sidewalk Widths 0.0 Ft Rt-Side		Chaining Date	None
0.0 Ft Lt-Side		207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb 0.0 Ft.		212 Structure Load Rated	01/01/1901
52 Deck Width 0.0 Ft.		213 Federal Aid Project Number	CASS COUNTY DRAIN 21
53 Min Vert Clear. Over Bridge 99 Ft. 12 In.		214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance 0 Ft. 0 In.		216 Inspector	Finton, Nguyen
N Feature not hwy or RR		Navigation Data	
55 Min Lateral UnderClear. - Rt 99.9 Ft.		38 Navigation Control	Permit Not Required
N Feature not hwy or RR		39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt 0.0 Ft.		40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 14X14X68' PRECAST BOX CULVERT		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WF01

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	203	70	143	30	60	0	0	0	0
Notes: _										
1080/1:Delamination/Spall/Patched Area	ft	49	0	0	100	49	0	0	0	0
1130/1:Cracking (RC and Other)	ft	11	0	0	100	11	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Random cracking & efflorescence in all boxes up to 0.007 longitudinal. SE wingwall has exposed rebar. Joint separation up to 3/4". N end has minor undermining. W wall N end spall with rebar exposed. Washout exposed corners of the roof.

Alert Code 1: 3' silt in east barrel, and concrete debris in center barrel. Misalignment of precast barrel sections throughout structure. Random horizontal cracking in several outer wall sections.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WF07 B

200 System Designation	4 - Urban	Classification	
201 Status		12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	-2.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Urban, Collector
04 City	WEST FARGO CITY	37 Historical Significance	Unknown (NBI)
05 Inventory Route	One Route Under	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	09224 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY HIGHWAY 19	102 Direction of Traffic	2 2-way traffic
09 Location	CR 19 WEST FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.600	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Unknown
16 Latitude	46d 53' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 54' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	658882.6 5194218.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	
Structure Type and Material		60 Substructure	
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	
Stringer		62 Culvert and Retaining Walls	
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	-1		Unknown
46 No. Approach Spans	-1	41 Structure Open, Closed or Posted	Unknown (NBI)
107 Deck Struct Type	Unknown (NBI)	63 Operating Rating Method	Unknown (NBI)
108 Wearing Surface	Unknown (NBI)	64 Oper. Rating	HS Tons
Membrane	Unknown (NBI)	65 Inventory Rating Method	Unknown (NBI)
Dk Protect	Unknown (NBI)	66 Inv. Rating	HS Tons
208 Dk Overburden	1 None	70 Bridge Posting	Unknown (NBI)
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	1936 106 Yr Reconstructed	Appraisal	
42 Type of Service	2 Railroad - On	67 Structural Condition	
	1 Highway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	3 Intolerable - Correct
29 ADT	1,900 30 Year of ADT	71 Waterway Adequacy	
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance	14 Ft. 2 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	Unknown (NBI)	91 Designated Inspection Frequency	24 Months
34 Skew	-1.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	Unknown (NBI)	Fracture Critical	N
47 Total Horizontal Clearance	27.6 Ft.	Underwater	N
48 Length of Max Span	32 Ft.	Other Special	N
49 Structure Length	38.06 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	-1.0 Ft Rt-Side	Chaining Date	None
	-1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	-1.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	Ft. In.	216 Inspector	Kirkevold, Finton
54 Min Vert Underclearance	14 Ft. 1 In.	Navigation Data	
	H Hwy beneath struct	38 Navigation Control	Unknown (NBI)
55 Min Lateral UnderClear. - Rt	0.7 Ft.	39 Navigation Vertical Clearance	Ft.
	H Hwy beneath struct	40 Navigation Horizontal Clearance	Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: WF07 B

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
107/1:Steel Opn Girder/Beam	ft	646	38	245	62	401	0	0	0	0
1000/1:Corrosion	ft	401	0	0	100	401	0	0	0	0
Notes:Minor corrosion on steel girders - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	75	49	37	17	13	33	25	0	0
1090/1:Exposed Rebar	ft	13	0	0	100	13	0	0	0	0
Notes:South fascia beam has rebar exposed - 10/30/2019										
7000/1:Damage	ft	25	0	0	0	0	100	25	0	0
Notes:impact damage to the fascia beams - 10/30/2019										
205/3:Re Conc Column	each	4	0	0	75	3	25	1	0	0
1090/3:Exposed Rebar	each	4	0	0	75	3	25	1	0	0
Notes:South column 1, 2, 3 has cracks with rebar exposed. - 10/30/2019										
215/3:Re Conc Abutment	ft	69	75	52	25	17	0	0	0	0
1130/3:Cracking (RC and Other)	ft	17	0	0	100	17	0	0	0	0
Notes:Cracks counted in concrete abutment - 10/30/2019										
234/1:Re Conc Pier Cap	ft	36	78	28	22	8	0	0	0	0
1090/1:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:Spalling with exposed rebar on concrete cap ends - 10/30/2019										
1130/1:Cracking (RC and Other)	ft	7	0	0	100	7	0	0	0	0
Notes:random cracking in concrete cap - 10/30/2019										
313/1:Fixed Bearing	each	34	0	0	100	34	0	0	0	0
1000/1:Corrosion	each	34	0	0	100	34	0	0	0	0
Notes:minor corrosion on fixed bearing - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	0	0	100	1	0	0	0	0
Notes:traffic impact to the fascia beams - 10/30/2019										
8401/1:Wings	each	4	25	1	75	3	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	3	0	0	100	3	0	0	0	0
Notes:All wingwalls have areas of heavy concrete deterioration. - 10/30/2019										

Remarks: Asphalt roadway. Roadway has some rutting. Signed 13' 7" both directions and on north exterior beam. Vertical curves both directions. Wing walls are pulling away from abutment. Nw wing walls has been put back into place and dead man anchors installed. All wingwalls have areas of heavy concrete deterioration. Traffic impact to fascia girders with rebar showing in south girder. Vertical crack in west abutment. South column 1, 2, 3 has cracks with rebar exposed. Column 4 has honeycombing. North fascia beam has shear crack and ne has rebar exposed - 10/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WF09

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Urban, Minor Arterial
04 City	WEST FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	09233 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	13TH AVE WEST WEST FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.900	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 54' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	659538.5 5192008.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2005 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	4,900 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	40 Ft.	90 Date of Last Inspection	August 31, 2017
33 Bridge Median	1 Open median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	— 01/01/1901
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	U-CMU-8-922(027)028
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Maneval, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10 X 12 X 134' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WF09

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	268	99	266	1	2	0	0	0	0
Notes: _										
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	1	0	0	100	1	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: SPALL 1 foot X 4 inch ONTHE ROOF OF EAST BOX. at segment # 21 & top roof have hair luine cracked.
 5/17/2016 -Tie bar missing nut where pipe enters from the west. Debris hung up at south end. Went thru with boat 3' of water. Aug 31 2017 (wade inspection) SPALL 1 foot X 4 inch ONTHE ROOF OF EAST BOX. at segment # 21 & top roof have hair luine cracked.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WF11

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Urban, Collector
04 City	WEST FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	09229 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	7TH AVE WEST-WEST FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.350	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 52' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 54' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	659544.3 5192815.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1995 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	3,050 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	36 Ft.	90 Date of Last Inspection	August 31, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	44.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.98 Ft.	218 Channel Profile	— 01/01/1901
50 Curb/Sidewalk Widths	3.9 Ft Rt-Side	Chaining Date	None
	3.9 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRU-SER-8-892-(012)013
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Maneval, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X12X146' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WF11

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	292	88	258	12	34	0	0	0	0
Notes: _										
1000/3:Corrosion	ft	4	0	0	100	4	0	0	0	0
Notes: _										
1190/3:Abrasion(PSC/RC)	ft	30	0	0	100	30	0	0	0	0
Notes: _										
8398/4:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/4:Settlement	each	2	0	0	100	2	0	0	0	0
Notes: _										
8401/4:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 5/17/2016 - Minor scour hole at south end. Went thru culvert with boat 2' of water. Aug 31 2017, (wade inspection) minor misalignment / separation approximately 1-0".

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WF12

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Urban, Local
04 City	WEST FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	CITY OF WEST FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 54' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	659409.4 5195171.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2003 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	3,800 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	40 Ft.	90 Date of Last Inspection	September 18, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	27.89 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRU-8-992(025)026
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X12X180' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: WF12

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	260	95	248	5	12	0	0	0	0
Notes: _										
1080/3:Delamination/Spall/Patched Area	ft	9	0	0	100	9	0	0	0	0
1090/3:Exposed Rebar	ft	3	0	0	100	3	0	0	0	0
8398/4:Slope Protection	each	4	100	4	0	0	0	0	0	0
8401/4:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B and A end markers all 4 corners - (down inslopes). Sep 2017 West Fargo city have constructed a sew system along the boxes which have been sheet piling at both end of the structure / pumped the water out of the structure , Walk inside inspection but do not know that the debris will be clean up after construction or not ? 9 spalled / rebar exposed minor misalignment & separated but no infiltration evidence.

Alert Code 1: Debris have built up inside the structure : box # 1 = 70 ft from north end ; box # 2 40 ft from north end.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WF13 B

200 System Designation	4 - Urban	Classification	
201 Status		12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	-2.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Urban, Minor Arterial
04 City	WEST FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	One Route Under	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 09236 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CENTER STREET	102 Direction of Traffic	2 2-way traffic
09 Location CENTER STREET WEST FARGO		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.700	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Unknown
16 Latitude	46d 52' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 53' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 660008.3 5194159.8		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	
Structure Type and Material		60 Substructure	
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	
Stringer		62 Culvert and Retaining Walls	
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	-1		Unknown
46 No. Approach Spans	-1	41 Structure Open, Closed or Posted	Unknown (NBI)
107 Deck Struct Type	Unknown (NBI)	63 Operating Rating Method	Unknown (NBI)
108 Wearing Surface	Unknown (NBI)	64 Oper. Rating	HS Tons
Membrane	Unknown (NBI)	65 Inventory Rating Method	Unknown (NBI)
Dk Protect	Unknown (NBI)	66 Inv. Rating	HS Tons
208 Dk Overburden 1	None	70 Bridge Posting	Unknown (NBI)
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built 1945 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	2 Railroad - On	67 Structural Condition	
	1 Highway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	3 Intolerable - Correct
29 ADT 5,000 30 Year of ADT 2010		71 Waterway Adequacy	
109 Average Daily Truck Traffic	4.00	72 App. Rdwy. Alignment	Unknown (NBI)
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance	13 Ft. 11 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	Unknown (NBI)	91 Designated Inspection Frequency	24 Months
34 Skew	-1.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
35 Structure Flared	Unknown (NBI)	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	26 Ft.	Other Special	N
49 Structure Length	38.06 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	-1.0 Ft Rt-Side	Chaining Date	None
	-1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	-1.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	Ft. In.	216 Inspector	Kirkevold, Finton
54 Min Vert Underclearance	13 Ft. 8 In.	Navigation Data	
	H Hwy beneath struct	38 Navigation Control	Unknown (NBI)
55 Min Lateral UnderClear. - Rt	0.7 Ft.	39 Navigation Vertical Clearance	Ft.
	H Hwy beneath struct	40 Navigation Horizontal Clearance	Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: WF13 B

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
107/1:Steel Opn Girder/Beam	ft	646	38	245	62	401	0	0	0	0
1000/1:Corrosion	ft	401	0	0	100	401	0	0	0	0
Notes:Minor corrosion on bottom of girders - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	75	0	0	100	75	0	0	0	0
7000/1:Damage	ft	75	0	0	100	75	0	0	0	0
Notes:Concrete beams have traffic impact damage - 10/30/2019										
205/3:Re Conc Column	each	4	0	0	100	4	0	0	0	0
1080/3:Delamination/Spall/Patched Area	each	2	0	0	100	2	0	0	0	0
Notes:Spalling on concrete columns - 10/30/2019										
1130/3:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
Notes:Cracking on concrete columns - 10/30/2019										
215/3:Re Conc Abutment	ft	69	74	51	26	18	0	0	0	0
1130/3:Cracking (RC and Other)	ft	18	0	0	100	18	0	0	0	0
Notes:Cracking in abutments - 10/30/2019										
234/1:Re Conc Pier Cap	ft	36	69	25	22	8	8	3	0	0
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	0	0	100	3	0	0
Notes:Spalling in pier cap - 10/30/2019										
1130/1:Cracking (RC and Other)	ft	8	0	0	100	8	0	0	0	0
Notes:Cracking in pier cap - 10/30/2019										
313/1:Fixed Bearing	each	34	0	0	100	34	0	0	0	0
1000/1:Corrosion	each	34	0	0	100	34	0	0	0	0
Notes:Minor corrosion on bearings - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Steel protective coating is substantially effective - 10/30/2019										
7362/1:Superstructure Traffic Impact	each	1	0	0	100	1	0	0	0	0
Notes:Traffic impact damage to fascia girders - 10/30/2019										
8401/1:Wings	each	4	50	2	50	2	0	0	0	0
4000/1:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:West wing walls are separated and settled - 10/30/2019										

Remarks: NBI Remarks: Road is rough. Vertical curves both directions. Signed for '13 ft. 6 in.' both directions & on structure. 'road subject to flooding' & '25 mph' both directions. Asphalt overlay is breaking up. N fascia beam has 14' metal sleeve repair. - 10/30/2019

Alert Code 1: Girders have varying degrees of rust. abuts., wingwalls & columns have varying degrees of deterioration - spalling cracking, etc. - 10/30/2019

Alert Code 2: Exterior girders are concrete. Both have been hit and have exposed rebar. NE wingwall has been put in place & dead man anchors installed. Nw wingwall has expandable foam in abut. To wingwall joint. North exterior girder has ugly, rusty, vertical crack. - 10/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WF17

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Urban, Minor Arterial
04 City	WEST FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	09232 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	SHEYENNE STREET-W FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.520	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 54' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	659755.6 5191151.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1993 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5,000 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	2.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	40 Ft.	90 Date of Last Inspection	August 31, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	35.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	26.90 Ft.	218 Channel Profile	— 01/01/1901
50 Curb/Sidewalk Widths	8.5 Ft Rt-Side	Chaining Date	None
	4.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	SU-8-992(009)010
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen, Maneval
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X12X156' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WF17

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	275	87	238	14	37	0	0	0	0
Notes: _										
1080/3:Delamination/Spall/Patched Area	ft	12	0	0	100	12	0	0	0	0
Notes: _										
1190/3:Abrasion(PSC/RC)	ft	25	0	0	100	25	0	0	0	0
Notes: _										
8401/4:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Aug 31 2017. (wade inspection) A large tree inside box # 2 at 2/3 of structure length from the west end. minor misalignment / separation in randomly segments .

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WF20

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Urban, Minor Arterial
04 City	WEST FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 09221 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE DIVERSION	102 Direction of Traffic	2 2-way traffic
09 Location	CITY OF WEST FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.900	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 29.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 55' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 658607.1 5195206.2		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type :stressed concrete continuous		61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type 1 Concrete-Cast-in-Place		63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface 1 Monolithic Concrete		64 Oper. Rating HS 55	99 Tons
Membrane 0 None		65 Inventory Rating Method	1 LF Load Factor
Dk Protect 1 Epoxy Coated Reinforci		66 Inv. Rating HS 33	61 Tons
208 Dk Overburden 1	None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1991 106 Yr Reconstructed		Appraisal	
42 Type of Service 1 Highway - On		67 Structural Condition	7 Above Min Criteria
5 Waterway - Under		68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure 2		69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 2,000 30 Year of ADT 2019		71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic 6.00		72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length 2 Miles		36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance 99 Ft. 12 In.		Inspections	
32 Approach Roadway Width 44 Ft.		90 Date of Last Inspection	November 04, 2019
33 Bridge Median 0 No median		91 Designated Inspection Frequency	24 Months
34 Skew 0.00		92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared 0 No flare		Fracture Critical N	
47 Total Horizontal Clearance 39.7 Ft.		Underwater N	
48 Length of Max Span 83 Ft.		Other Special N	
49 Structure Length 250.98 Ft.		218 Channel Profile 1 48	06/14/2019
50 Curb/Sidewalk Widths 0.0 Ft Rt-Side		Chaining Date	None
0.0 Ft Lt-Side		207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb 40.0 Ft.		212 Structure Load Rated	01/01/1901
52 Deck Width 42.7 Ft.		213 Federal Aid Project Number	CB8903-1012
53 Min Vert Clear. Over Bridge 99 Ft. 12 In.		214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance 0 Ft. 0 In.		216 Inspector	Kelsch, Czczok
N Feature not hwy or RR		Navigation Data	
55 Min Lateral UnderClear. - Rt 99.9 Ft.		38 Navigation Control	Permit Not Required
N Feature not hwy or RR		39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt 0.0 Ft.		40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: WF20

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/4:Re Concrete Deck	sq.ft	10,667	100	10,667	0	0	0	0	0	0
104/4:Pre Clsd Box Girder	ft	1,506	100	1,504	0	2	0	0	0	0
1080/4:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Beam 1, Span 3 has a spall in the bottom. - 11/4/2019										
202/3:Steel Column	each	18	0	0	100	18	0	0	0	0
1000/3:Corrosion	each	18	0	0	100	18	0	0	0	0
Notes:Pier piling have rust - 11/4/2019										
515/3:Steel Protective Coating	sq.ft	999	60	599	40	400	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	400	0	0	100	400	0	0	0	0
Notes:Rust appearing on pier piling - 11/4/2019										
210/4:Re Conc Pier Wall	ft	72	100	72	0	0	0	0	0	0
215/4:Re Conc Abutment	ft	85	97	82	4	3	0	0	0	0
1130/4:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
Notes:Cracking in concrete abutments - 11/4/2019										
234/4:Re Conc Pier Cap	ft	79	100	79	0	0	0	0	0	0
321/4:Re Conc Approach Slab	sq.ft	999	0	0	100	999	0	0	0	0
4000/4:Settlement	sq.ft	999	0	0	100	999	0	0	0	0
Notes:Approach slabs have settled and been overlaid with asphalt - 11/4/2019										
331/4:Re Conc Bridge Railing	ft	502	93	468	7	34	0	0	0	0
1130/4:Cracking (RC and Other)	ft	34	0	0	100	34	0	0	0	0
Notes:Cracks counted in concrete bridge rail - 11/4/2019										
8398/4:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	1	100	1	0	0	0	0	0	0

Remarks: NBI Remarks: Single B&A end markers on all corners. Both approach slabs have been overlaid. New guard rail East side. - 11/4/2019

Alert Code 1: Underside of deck drains are scaling and have rust stains. Random exposed rebar on barrier. W slab has settled & pulled away from structure, west panel has pulled 3-1/4" away. Some rust on pier pile. Deck has minor pop outs. Cracking in diaphragms above outside box beams. Beam 1, span 3 has a spall on the bottom of the beam. - 11/4/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WF21

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Rural, Local
04 City	BARNES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH OF WEST FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 54' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	659777.3 5188792.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2009 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	250 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	75 Ft.	90 Date of Last Inspection	October 09, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	74.8 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	43.96 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 14'X 18'X 233 RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WF21

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	699	99	690	1	9	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: PREVIOUS BRIDGE NUMBER 9-138-28.0 Replaced with box in 2009. Hairline cracking in wing walls. Misplacement at sections. End of some sections broken and sealed with epoxy sealer. Minor debris in channel at west box. OCT 09 2017: NEED BOAT & CLEARANCE

Alert Code 1: Spall with exposed rebar (rusting) in center box, 4 sections in from south end.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WF22

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Rural, Major Collector
04 City	WEST FARGO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00949 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE DIVERSION	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH WEST FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	14.997	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 54' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	659537.8 5189953.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 36 67 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	3,200 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	October 28, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	N
48 Length of Max Span	91 Ft.	Other Special	N
49 Structure Length	276.90 Ft.	218 Channel Profile	1 48 06/14/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/10/2018
	40.0 Ft.	213 Federal Aid Project Number	CB8904-1702
52 Deck Width	42.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevold, Finton, Kelsch, Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: WF22

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	14,399	100	14,364	0	35	0	0	0	0
1130/2:Cracking (RC and Other)	sq.ft	35	0	0	100	35	0	0	0	0
Notes:Random cracking throughout deck - 10/28/2019										
510/2:Wearing Surfaces	sq.ft	10,245	100	10,210	0	35	0	0	0	0
3220/2:Crack (Wearing Surface)	sq.ft	35	0	0	100	35	0	0	0	0
Notes:Random cracking throughout wearing surface - 10/28/2019										
104/2:Pre Clsd Box Girder	ft	2,492	100	2,492	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	121	98	118	3	3	0	0	0	0
1130/3:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
Notes:Minor cracking in the walls - 10/28/2019										
215/3:Re Conc Abutment	ft	121	99	120	1	1	0	0	0	0
1130/3:Cracking (RC and Other)	ft	1	0	0	100	1	0	0	0	0
Notes:1 crack in concrete abutment - 10/28/2019										
234/2:Re Conc Pier Cap	ft	121	100	121	0	0	0	0	0	0
301/1:Pourable Joint Seal	ft	80	100	80	0	0	0	0	0	0
321/2:Re Conc Approach Slab	sq.ft	999	100	999	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	554	99	548	1	6	0	0	0	0
1130/2:Cracking (RC and Other)	ft	6	0	0	100	6	0	0	0	0
Notes:Cracking in concrete bridge rail - 10/28/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 1/05/2016 - This bridge is now city owned and changed to WF22 was 09-138-28.2. Deck overlaid and widened in 2019. - 10/28/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WF24

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Fargo District	22 Owner	City/Municipal Hwy Agenc
03 County	Cass	26 Functional	Rural, Local
04 City	BARNES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH OF WEST FARGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 53' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	660236.7 5187180.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2003 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	120 30 Year of ADT 2015	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	4.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	45 Ft.	90 Date of Last Inspection	January 18, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	44.9 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	45.93 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	12/10/2018
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-09(28)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 14X16X115' PRECAST RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WF24

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	345	100	345	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	4	100	4	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Remarks: B&A end markers at SE & SW corners. Minor misalignment of sections. Damage to chain link fence on the south side. This structure was previously 09-139-29.0. 8/9/2017: High water, not able to inspect. 10/16/17 & 11/20/17: Need ice and clearance for inspection. 1/18/18: Inspection able to be completed.

Alert Code 1: Debris hung up at the south end of the west and center barrels.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-103-04.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Cavalier	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST OF SARLES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 56' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 56' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	504209.1 5421882.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	26 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	November 15, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	29.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/23/2016
	0.0 Ft.	213 Federal Aid Project Number	CNOC-1006(077)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Freund
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
DOUBLE 14 X 10 X 66'			

Structure Number: 10-103-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
8417/3:Re Conc Culvert Precast	ft	132	100	132	0	0	0	0	0	0
Notes:_										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:_										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes:_										

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-105-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Cavalier	26 Functional	Rural, Local
04 City	CYPRESS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CYPRESS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 1 EAST OF CALVIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 54' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 54' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	506988.8 5417039.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1989 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	November 15, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-10(5)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X6X48' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-105-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	95	100	95	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor cracking at wing corners.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-115-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Cavalier	26 Functional	Rural, Local
04 City	LINDEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SNOWFLAKE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 3 SOUTH OF HANNAH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 56' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 40' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	524015.3 5420554.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	15 Tons
27 Yr Built	2001 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	12 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 15, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	41.99 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BO-10(008)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD, 10X8X50' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 10-115-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	400	88	352	11	44	1	4	0	0
1080/1:Delamination/Spall/Patched Area	ft	6	0	0	33	2	67	4	0	0
1130/1:Cracking (RC and Other)	ft	394	89	352	11	42	0	0	0	0
330/1:Metal Bridge Railing	ft	85	100	85	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8399/1:Slope Protection, RC	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	25	1	75	3	0	0	0	0
1130/1:Cracking (RC and Other)	each	4	25	1	75	3	0	0	0	0

Remarks: NBI Remarks: Minor cracking of wing corners ne, sw, nw. Narrow bridge and posted for 15 ton, signs on both ends. 9/2010 - POPOUT IN TOP CORNER OF NW WING. 9/18/2014 popout in NE parapet corner by NE wing. 11/15/2018 - The NE and NW corners have exposed rebar in the popouts and cracking in the SW corner of wing connection.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-117-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Cavalier	26 Functional	Rural, Local
04 City	LINDEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SNOWFLAKE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 4 NORTH OF WALES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 56' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 37' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	527064.0 5421912.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1997 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 15, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	32.15 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DPI-0036(003)102
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10X10X50' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-117-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	151	91	137	0	0	9	14	0	0
1080/1:Delamination/Spall/Patched Area	ft	8	0	0	0	0	100	8	0	0
1090/1:Exposed Rebar	ft	6	0	0	0	0	100	6	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	50	2	50	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	4	50	2	50	2	0	0	0	0

Remarks: NBI Remarks: Cracks in wing corners northwest and southeast. Six inches silt in all barrels. 9/2010 - POPOUTS IN WING CORNERS NW & SE. 9/18/2014 popouts with exposed rebar NW & SE parapet and wing corner

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-117-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Cavalier	26 Functional	Rural, Local
04 City	MINTO TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 2 SOUTH WALES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 51' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 38' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	526303.9 5412252.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2015 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	26 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	November 15, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	32.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	12/03/2015
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE 10' X 8' X 54' RCBC		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-117-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	162	100	162	0	0	0	0	0	0
Notes:_										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-118-04.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Cavalier	26 Functional	Rural, Major Collector
04 City	LINDEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01006 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	EAST SNOWFLAKE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 NORTH OF WALES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	21.396	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 57' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 36' 23.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	528819.6 5423011.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	152 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	November 15, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	15 Ft.	Other Special	N
49 Structure Length	31.00 Ft.	218 Channel Profile	0 0 10/01/2014
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/23/2016
	0.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Freund
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
double 15 x 13 x 60' RCBC			

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-118-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	120	100	120	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Alert Code 1: .

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-118-15.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Cavalier	26 Functional	Rural, Major Collector
04 City	MOSCOW TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01017 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 SOUTH OF WALES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	21.096	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 47' 28.00"	110 Designated National Network	1 Part of natl network
17 Longitude	98d 36' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	528941.3 5404322.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1977 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	190 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	November 15, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.9 Ft.	Underwater	N
48 Length of Max Span	9 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	ROM-9999-007
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 9X7X34' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-118-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	102	98	100	2	2	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	102	98	100	2	2	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Posted narrow bridge. Built wings and parapet up using 7-3"x12" planks. 10/2010 - NE WING TIMBER HAS SECTION LOSS DUE TO FIRE DAMAGE.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-121-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Cavalier	26 Functional	Rural, Local
04 City	WATERLOO TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 5 SOUTH OF DRESDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 44' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 32' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	533216.7 5399414.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	26 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	November 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	29.00 Ft.	218 Channel Profile	0 0 10/01/2014
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	06/23/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 14 X 7 X 50' RCBC		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-121-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	100	100	100	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-121-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Cavalier	26 Functional	Rural, Local
04 City	WATERLOO TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 6 SOUTH OF DRESDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 44' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 32' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	533800.4 5398113.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1989 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	November 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	21.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-10(5)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X6X48' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-121-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	95	90	85	11	10	0	0	0	0
1130/2:Cracking (RC and Other)	ft	95	90	85	11	10	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Scour hole to the west.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-123-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Cavalier	26 Functional	Rural, Major Collector
04 City	DRESDEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01006 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MULBERRY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 3 NORTH OF WALES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	27.094	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 56' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 30' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	535514.1 5420332.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 30 56 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1999 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	96 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	November 15, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRC-1006(63)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10X6X44' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-123-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	131	88	115	12	16	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	6	0	0	100	6	0	0	0	0
1130/1:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Some minor cracking in wings and parapets on all four corners. Minor vertical cracks in walls.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-123-32.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Cavalier	26 Functional	Rural, Local
04 City	BILLINGS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 6 SOUTH OF LOMA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 32' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 29' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	537441.0 5376849.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1975 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X6X36' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-123-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	72	83	60	17	12	0	0	0	0
1130/2:Cracking (RC and Other)	ft	72	83	60	17	12	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Cattle fence attached to center of headwalls both ends of structure.Minor aligator cracking in wings. Minor cracking on interior and wingwall.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-124-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Cavalier	26 Functional	Rural, Local
04 City	DRESDEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MULBERRY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 EAST 1 SOUTH OF HANNAH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 57' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 29' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	537182.1 5423577.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 15, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-10(2)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X8X44' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-124-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	89	97	86	3	3	0	0	0	0
1130/2:Cracking (RC and Other)	ft	89	97	86	3	3	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor cracks in walls and parapet. Scour on North and South sides of box culvert about 2 ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-124-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Cavalier	26 Functional	Rural, Major Collector
04 City	SOUTH DRESDEN TOWNSH	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01023 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 4 NORTH OF LANGDON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	4.199	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 49' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 28' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	538545.6 5407658.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1977 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	85 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	9 Ft.	Other Special	N
49 Structure Length	27.89 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	ROM-9999-007
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 9X6X38' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-124-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	115	94	108	6	7	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	115	94	108	6	7	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor cracking at wing corners and parapets. Spalling at NE wing and parapet corner.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-125-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Cavalier	26 Functional	Rural, Local
04 City	OUNT CARMEL TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MOBREY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST OF MAIDA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 59' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 28' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	538935.4 5426813.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1989 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 15, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-10(5)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X8X48' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-125-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	95	97	92	3	3	0	0	0	0
1130/2:Cracking (RC and Other)	ft	95	97	92	3	3	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor vertical cracks in walls. Six inches dirt in east barrel.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-125-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Cavalier	26 Functional	Rural, Local
04 City	LANGDON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST 3 NORTH OF LANGDON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 48' 17.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 28' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	538783.8 5405882.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete continuous	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2011 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	15 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	November 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	50.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	08/18/2011
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0A10(014)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 10 X 8 50 RCBC		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-125-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-137-28.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Cavalier	26 Functional	Rural, Local
04 City	OSNABROCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	OUTH BRANCH PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 4 SOUTH OSNABROCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 36' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 11' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	559748.5 5383770.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2002 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 20, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-10(013)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X14X58' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-137-28.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	116	100	116	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/20/2018 - Missing Bridge End Marker on the NW Corner.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-139-20.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Cavalier	26 Functional	Rural, Major Collector
04 City	HAY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01039 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TONGUE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH OSNABROCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	12.398	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 43' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 08' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	562802.7 5397069.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	330 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 20, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRS-1039(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X5X48' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-139-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	95	100	95	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Poor channel alignment from west.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-141-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Cavalier	26 Functional	Rural, Local
04 City	FREMONT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE NO. PEMBINA RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 5 NORTH VANG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 58' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 06' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	564944.6 5425966.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 14, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-10(6) SITE 2
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X8X66' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-141-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	131	98	128	2	3	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	131	98	128	2	3	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Embankment erosion upstream & downstream. Debris north side on interior wall. Scour hole south end on outlet side, 50x20x4' deep. Scour hole is now 5 ft deep on south end and undermining 10 ft in 7/31/2012. 9/16/14 - Scour hole is now 2.5 ft deep on the south end with the concrete slab and riprap gone and now just shale.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-143-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Cavalier	26 Functional	Rural, Local
04 City	FREMONT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE NO. PEMBINA RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 2 NORTH OF VANG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 56' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 04' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	567769.5 5421096.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	20 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	November 14, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-10(2)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X8X48' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 10-143-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	95	100	95	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks:Scour hole South side washing out and undermining 3 ft deep.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-109-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	LORRAINE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 2 NORTH FORBES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 57' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 49' 07.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	514059.0 5090043.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 53 96 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 31 58 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	23 Gravel/Dir	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1977 106 Yr Reconstructed -1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 07, 2019
32 Approach Roadway Width	15 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	20 Ft.	218 Channel Profile	1 48 05/16/2019
49 Structure Length	21.98 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	03/09/2018
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	OS-11(1) SITE 2
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Wegner, Carlson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 11-109-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	154	98	151	2	3	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:3 CS 2 spalls on beams, 2 are located on the south half of the bridge where the old piling is touching and 1 is on the north half where the old piling is touching the beams - 8/7/2019										
206/3:Timber Column	each	10	80	8	20	2	0	0	0	0
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes:Columns 1 and 4 on the south side have CS2 splits - 8/7/2019										
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	59	39	23	61	36	0	0	0	0
1170/1:Split/Delamination (Timber)	ft	36	0	0	100	36	0	0	0	0
Notes:South timber pier cap has 6ft of CS2 split, North has 30ft of CS2 split - 8/7/2019										
331/1:Re Conc Bridge Railing	ft	43	54	23	47	20	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:1ft of CS2 spall on East rail - 8/7/2019										
1090/1:Exposed Rebar	ft	11	0	0	100	11	0	0	0	0
Notes:Exposed rebar on the concrete rail due to inadequate coverage of the rebar; 6ft of CS2 on the West rail and 5 ft on the East rail - 8/7/2019										
1130/1:Cracking (RC and Other)	ft	8	0	0	100	8	0	0	0	0
Notes:4ft of CS2 cracks on West rail and 4ft of CS2 cracks on East rail - 8/7/2019										
332/1:Timb Bridge Railing	ft	43	33	14	44	19	23	10	0	0
1140/1:Decay/Section Loss	ft	4	0	0	0	0	100	4	0	0
Notes:Post 4 on the West side and Posts 2,3 and 5 on the East side have decay - 8/7/2019										
1170/1:Split/Delamination (Timber)	ft	25	0	0	76	19	24	6	0	0
Notes:All posts on the timber rail are split; 6ft of CS3 split on West rail and 19ft of CS2 split - 8/7/2019										
8398/3:Slope Protection	each	2	0	0	0	0	0	0	100	2
Notes:Slope protection is essentially non-existent at this point - 8/7/2019										
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1140/1:Decay/Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:NE wing wall has a hole burnt through it. - 8/7/2019										

Remarks: There is a build up of silt in the channel on both sides of the bridge. Debris in the channel on the East side of the bridge including trees growing in the channel. - 8/7/2019

Alert Code 1: There are multiple piling from a previous structure that are sticking out in the channel. Four of these piling are touching the beams and there are others that are up in between the gaps in between the beams that could eventually touch the structure. - 8/7/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-111-11.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01111 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5.5 SOUTY OF MERRICOURT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 07' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 46' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	517275.0 5108425.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete continuous	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2011 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	125 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	98 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	50.0 Ft.	Underwater	N
48 Length of Max Span	7 Ft.	Other Special	N
49 Structure Length	32.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	08/18/2011
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CER-1111(054)
53 Min Vert Clear. Over Bridge	98 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Wegner, Carlson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD 7 X 3 X 60 RCBC		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-111-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
243/1:Other Culvert	ft	240	99	238	1	2	0	0	0	0
Notes:Minor amounts of sediment in barrel 4 the whole length. - 8/6/2019										
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Grout in joint between barrels 2 and 3 is spalled - 8/6/2019										
6000/1:Scour	ft	1	0	0	100	1	0	0	0	0
Notes:Minor scour at the West end of barrel 2 - 8/6/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-111-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01111 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7.5 SOUTH OF MERRICOURT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 06' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 46' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	517259.0 5105411.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete continuous	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2011 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	125 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	98 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	50.0 Ft.	Underwater	N
48 Length of Max Span	7 Ft.	Other Special	N
49 Structure Length	32.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	08/18/2011
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CER-1111(055)
53 Min Vert Clear. Over Bridge	98 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Wegner, Carlson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD 7 X 3 X 69 RCBC		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-111-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
243/1:Other Culvert	ft	240	99	238	1	2	0	0	0	0
Notes:6" to 1' of sediment in barrels 3 and 4; Barrel 1 is approximately 70% plugged and Barrel 2 is approximately 60% plugged with sediment - 8/6/2019										
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:1'x1' spall w/exposed rebar on West end between barrels 3 and 4 - 8/6/2019										
1090/1:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:exposed rebar on west end between barrels 3 and 4 - 8/6/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: There is no rock in channel. No end markers - 8/6/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-114-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	ELM TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST OF FORBES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 56' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 42' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	522114.3 5087846.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 52 94 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 31 57 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1977 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	7 Countermeasures
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	January 03, 2018
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	20 Ft.	218 Channel Profile	1 48 05/16/2019
49 Structure Length	21.98 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	03/09/2018
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	OS-11(1) SITE 1
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-114-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	154	100	154	0	0	0	0	0	0
206/3:Timber Column	each	10	0	0	40	4	60	6	0	0
1160/3:Crack (Timber)	each	10	0	0	40	4	60	6	0	0
Notes: _										
216/3:Timber Abutment	ft	59	80	47	0	0	20	12	0	0
1160/3:Crack (Timber)	ft	12	0	0	0	0	100	12	0	0
Notes: _										
235/1:Timber Pier Cap	ft	59	73	43	27	16	0	0	0	0
1900/1:Distortion	ft	16	0	0	100	16	0	0	0	0
Notes: _										
331/1:Re Conc Bridge Railing	ft	45	95	41	9	4	0	0	0	0
1130/1:Cracking (RC and Other)	ft	43	91	39	9	4	0	0	0	0
332/1:Timb Bridge Railing	ft	43	95	41	5	2	0	0	0	0
1160/1:Crack (Timber)	ft	2	0	0	100	2	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	0	0	0	0	0	0	100	2
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor erosion SW, NW and SE wings. 2/2016 - 7 of the 10 piles are crushing into the cap 1/8 to 1/4". 9 locations on the tee beams are crushing into the cap 1/8 to 1/4".

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-115-24.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Major Collector
04 City	ELM TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01124 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TRIBUTARY TO ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST OF FORBES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.899	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 56' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 41' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	523513.6 5087269.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 31 57 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2000 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	October 16, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	90 Ft.	Other Special	N
49 Structure Length	91.86 Ft.	218 Channel Profile	1 48 05/20/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	10/26/2000
52 Deck Width	31.2 Ft.	213 Federal Aid Project Number	BRC-1124(54)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Carlson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-115-24.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,960	100	2,960	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	354	100	354	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	184	100	184	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	184	100	184	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-116-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	ALBION TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 NORTH 5 EAST OF FORBES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 03' 17.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 40' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	524889.0 5100161.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	96 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	70 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1977 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	30 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	3 SC - Unstable
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 12, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	15.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 05/16/2019
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	1.0 Ft Lt-Side	212 Structure Load Rated	03/09/2018
51 Bridge Rdwy Width - Curb to Curb		213 Federal Aid Project Number	OS-11(1) SITE 3
	27.9 Ft.	214 Delayed Inspection	Not Applicable
52 Deck Width	29.9 Ft.	216 Inspector	Carlson, Wegner
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	Navigation Data	
54 Min Vert Underclearance	0 Ft. 0 In.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
55 Min Lateral UnderClear. - Rt	99.9 Ft.	40 Navigation Horizontal Clearance	0 Ft.
	N Feature not hwy or RR	111 Pier or Abutment Protection	Unknown (NBI)
56 Min Lateral UnderClear. - Lt	0.0 Ft.	116 Minimum Navigation Vertical Clearance	Ft.
210 Culvert / 211 Description			

Structure Number: 11-116-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	200	97	194	1	1	3	5	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Small spall on beam face south side of bridge 3"x3". - 8/12/2019										
1110/1:Cracking (PSC)	ft	5	0	0	0	0	100	5	0	0
Notes:5' of CS3 crack on beam north side. Crack is through the beam at mid span.(pic) - 8/12/2019										
206/3:Timber Column	each	10	80	8	20	2	0	0	0	0
Notes:Only could see 1' of column due to high water. - 8/12/2019										
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes:West column #5 has small delamination at the top. East column #1 8"Lx1"D Delamination. - 8/12/2019										
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
Notes:Water level is to high to inspect abutment. - 8/12/2019										
235/1:Timber Pier Cap	ft	59	90	53	2	1	9	5	0	0
Notes:East pier cap: 2' of CS3 split south end, 1' of CS2 check north end, 5' of CS1 check West pier cap: 1.5' of CS3 check south end , 1.5' of CS3 split, 29' of CS1 check. - 8/12/2019										
1150/1:Check/Shake	ft	37	92	34	3	1	5	2	0	0
1170/1:Split/Delamination (Timber)	ft	3	0	0	0	0	100	3	0	0
331/1:Re Conc Bridge Railing	ft	49	71	35	29	14	0	0	0	0
Notes:North rail: 4' of CS2 exposed rebar, 3' of CS2 cracks. South rail: 7' of CS2 exposed rebar. - 8/12/2019										
1090/1:Exposed Rebar	ft	11	0	0	100	11	0	0	0	0
1130/1:Cracking (RC and Other)	ft	7	57	4	43	3	0	0	0	0
332/1:Timb Bridge Railing	ft	49	0	0	39	19	33	16	29	14
Notes:North rail has 9' of CS1 check, 12' of CS3 split, 14' of CS4 section loss, Post 2, 3, 4, and 5 have CS2 shake and check post 6 has CS2 shake. South rail has 3' of CS3 split, 24' of CS2 check, CS2 shake and check on all 6 post, post 5 also has CS3 decay. - 8/12/2019										
1140/1:Decay/Section Loss	ft	15	0	0	0	0	7	1	93	14
1150/1:Check/Shake	ft	19	0	0	100	19	0	0	0	0
1170/1:Split/Delamination (Timber)	ft	15	0	0	0	0	100	15	0	0
8398/3:Slope Protection	each	2	0	0	0	0	0	0	100	2
Notes:8-12-19 High water unable to inspect. - 8/12/2019										
8401/3:Wings	each	4	25	1	75	3	0	0	0	0
Notes:Northwest wing: 4' of wing damaged, CS2 scour behind wing, both columns leaning to the southeast Northeast wing: CS1 check on both columns, CS2 distortion on end of wing. Southeast wing: CS1 check on both columns, CS1 check on wing wall. Southwest wing: CS1 check on wing. - 8/12/2019										
1140/3:Decay/Section Loss	each	1	0	0	100	1	0	0	0	0
1150/3:Check/Shake	each	1	100	1	0	0	0	0	0	0
1900/3:Distortion	each	1	0	0	100	1	0	0	0	0
6000/3:Scour	each	1	0	0	100	1	0	0	0	0

Remarks: NBI Remarks: Guardrail on north side damaged by collision. 3 bridge end markers down. 3' crack midspan on north beam. - 8/12/2019

Alert Code 1: Moderate erosion behind both north wingwalls. - 8/12/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-116-24.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Major Collector
04 City	ELM TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01124 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST OF FORBES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	4.899	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 56' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 40' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	525147.2 5087253.7	Condition	
98 Border Bridge	46 South Dakota 50.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	000000007023000	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 23
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1992 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 15, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	85 Ft.	Other Special	N
49 Structure Length	85.96 Ft.	218 Channel Profile	1 48
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	05/20/2019
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	None
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	-1
	27.9 Ft.	213 Federal Aid Project Number	03/05/1996
52 Deck Width	31.2 Ft.	214 Delayed Inspection	CBRS-1124(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	Rowell, Belanger
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-116-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,691	100	2,691	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	430	100	429	0	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:2"x4" spall on outside of beam - 4/15/2019										
215/3:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	171	100	171	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	171	100	171	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-117-08.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Major Collector
04 City	HAMBURG TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01112 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST OF MONANGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	18.596	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 39' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	526311.5 5113012.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	68 30 Year of ADT 2019	71 Waterway Adequacy	4 Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 14, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	9 Ft.	Other Special	N
49 Structure Length	27.89 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRS-1112(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Carlson, Wegner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 5X8X36' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 11-117-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	108	0	0	79	85	21	23	0	0
Notes: Barrel #1: 5' of CS3 crack on west wall north end, 5"x3" delamination on west wall north end, 4' of CS2 efflorescence on walls, 18' of CS3 longitudinal cracks on walls, 3' of CS2 cracks on wall between barrel 1 and 2. Barrel #2: 10 CS 2 cracks on walls Barrel #3: 7' of CS2 cracks on walls. * In all barrels there is about 75% of the steel rebar chairs exposed on ceiling of barrels along with every barrel has CS2 hairline map cracking on ceiling. - 8/14/2019										
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	ft	103	0	0	78	80	22	23	0	0
8401/3:Wings	each	4	0	0	75	3	25	1	0	0
Notes: Northwest wing: CS2 Cracks Northeast wing: CS2 cracks Southwest wing: CS2 cracks with map cracking near the top corner Southeast wing: 2' of CS3 spall with 2' of CS2 exposed rebar, CS2 cracks. - 8/14/2019										
1080/3:Delamination/Spall/Patched Area	each	1	0	0	0	0	100	1	0	0
1130/3:Cracking (RC and Other)	each	3	0	0	100	3	0	0	0	0

Remarks: NBI Remarks: Minor cracking west barrel north side & all 4 corners by wings. 3/2016 - Beaver dam in all barrels. Minor erosion all four wings. 8/2019 - Erosion still behind all four wing walls. - 8/14/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-117-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	ELM TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH 7 WEST ELLENDALE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 58' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 40' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	525521.8 5092085.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1999 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DPI-0036(004)112
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Wegner, Carlson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14X8X44' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-117-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
243/3:Other Culvert	ft	89	87	77	14	12	0	0	0	0
Notes:All joints have separated 1/2" to 1" in the West barrel - 8/7/2019										
1010/3:Cracking	ft	4	0	0	100	4	0	0	0	0
Notes:3 CS2 cracks on N parapet, 1ft of CS 2 map cracking on South parapet - 8/7/2019										
1080/3:Delamination/Spall/Patched Area	ft	6	0	0	100	6	0	0	0	0
Notes:CS2 Spalls: 1ft of spall along south ceiling of both barrels, West barrel has 3 - 1ft spalls on the ceiling, North parapet has a spall on the NE corner, West barrel has 1ft of spall on the wall - 8/7/2019										
1120/3:Efflorescence/Rust Staining	ft	2	0	0	100	2	0	0	0	0
Notes:South parapet has efflorescence, West barrel has 1ft of Efflorescence CS2 - 8/7/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
Notes:Erosion behind SW wing - 8/7/2019										
1080/3:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes:Spall on top corner of NE wing - 8/7/2019										

Remarks: One bridge end marker down. - 8/7/2019

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SEC 409

Structure Number: 11-118-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	HAMBURG TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SOUTH FORK MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 1 SOUTH MONANGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 09' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 37' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	528584.4 5111746.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2007 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	55 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	19 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 12, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.5 Ft.	Underwater	N
48 Length of Max Span	15 Ft.	Other Special	N
49 Structure Length	35.10 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0011(016)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Carlson, Wegner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 15'X 10'X 58' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 11-118-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
243/3:Other Culvert	ft	116	74	86	22	26	3	4	0	0
1080/3:Delamination/Spall/Patched Area	ft	5	0	0	40	2	60	3	0	0
Notes:NW end of barrel 2 has 3' of CS3 spall. South side of center wall barrel 1 west end has 2' of CS2 spall. - 8/12/2019										
1090/3:Exposed Rebar	ft	1	0	0	0	0	100	1	0	0
Notes:NW end of barrel #2 has 1' of exposed rebar with section loss. - 8/12/2019										
1120/3:Efflorescence/Rust Staining	ft	3	0	0	100	3	0	0	0	0
Notes:1' Efflorescence on west parapet. 2' of Efflorescence on south wall of barrel #1. - 8/12/2019										
1130/3:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
Notes:10' of CS2 crack center wall. 6' of cracks south wall barrel #1. 3' of CS2 crack center wall barrel #1. Map cracking on west parapet. CS2 cracking on east parapet. - 8/12/2019										
6000/3:Scour	ft	1	0	0	100	1	0	0	0	0
Notes:Scour NE corner of barrel #2 1' deep at end of box. Scour at center wall west end 1' deep. - 8/12/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:NW, SE, and SW wings have CS2 map cracking. NE wing as #2 cracks. - 8/12/2019										

Remarks: 3/2016 - 1 bridge end marker missing.(2019 still missing) 8/2019 Sediment in both barrels. - 8/12/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-121-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	VALLEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH OF MONANGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 15' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 34' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	532825.1 5122648.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 28 51 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 31 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1948 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	24 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	January 03, 2018
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	1 48 05/21/2019
49 Structure Length	36.09 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	03/09/2018
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-121-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	289	0	0	100	289	0	0	0	0
206/3:Timber Column	each	10	30	3	60	6	10	1	0	0
1160/3:Crack (Timber)	each	10	30	3	60	6	10	1	0	0
Notes: _										
219/1:Stl Abutment	ft	49	0	0	100	49	0	0	0	0
235/1:Timber Pier Cap	ft	49	74	36	27	13	0	0	0	0
1160/1:Crack (Timber)	ft	13	0	0	100	13	0	0	0	0
Notes: _										
330/1:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	72	72	28	28	0	0	0	0
331/1:Re Conc Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	50	2	25	1	0	0	25	1

Remarks: NBI Remarks: Crossbrace broken on west abutment. Northeast wing is tilting slightly. Numerous hairline cracks on girders at midspan. New steel h-pile installed on east abutment. Minor erosion on roadway at southwest and northeast bridge ends. All bridge end markers are missing. East pile of SE wing split in half

Alert Code 1: Northwest wing is moderately tilted.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-121-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	KEYSTONE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 2 NORTH MONANGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 11' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 33' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	533455.8 5116106.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 27 49 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	August 14, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	62 Ft.	Other Special	N
49 Structure Length	65.94 Ft.	218 Channel Profile	1 48 05/21/2019
50 Curb/Sidewalk Widths	1.6 Ft Rt-Side	Chaining Date	None
	1.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/06/1996
52 Deck Width	31.2 Ft.	213 Federal Aid Project Number	BRO-11(8)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Wegner, Carlson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 11-121-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,067	80	1,654	20	413	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	413	0	0	100	413	0	0	0	0
Notes:Abrasion is located randomly throughout the entire surface of the deck. - 8/14/2019										
104/1:Pre Clsd Box Girder	ft	262	100	262	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	10	100	10	0	0	0	0	0	0
Notes:5-CS 1 cracks in South abutment, 5-CS 1 cracks in North abutment - 8/14/2019										
330/1:Metal Bridge Railing	ft	131	100	131	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	131	100	131	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	5	100	5	0	0	0	0	0	0
Notes:2-CS 1 cracks on West and 3-CS 1 cracks on East. - 8/14/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 1 bridge end maker down. Erosion behind NE wing wall. - 8/14/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-122-04.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Major Collector
04 City	VALLEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01104 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 1 EAST MONANGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	21.196	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 13' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 33' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	533817.7 5119429.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 33 61 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1984 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	55 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	April 15, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	61 Ft.	Other Special	N
49 Structure Length	64.96 Ft.	218 Channel Profile	1 48 05/21/2019
50 Curb/Sidewalk Widths	2.3 Ft Rt-Side	Chaining Date	None
	2.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/06/1996
52 Deck Width	32.5 Ft.	213 Federal Aid Project Number	CBRS-1104(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Belanger, Carlson, Wegner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 11-122-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,110	100	2,107	0	3	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	3	0	0	100	3	0	0	0	0
Notes:Efflorescence showing on the 3 #1 Cracks on the bottom of deck. - 4/15/2019										
1130/1:Cracking (RC and Other)	sq.ft	3	100	3	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	259	100	258	0	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:3"x3" spall located on beam 1 on the west end (see picture) - 4/15/2019										
215/1:Re Conc Abutment	ft	66	97	64	3	2	0	0	0	0
1130/1:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
331/1:Re Conc Bridge Railing	ft	131	99	129	2	2	0	0	0	0
1130/1:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
Notes:Cracking through out both sides of concrete bridge railing - 4/15/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-122-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	KEYSTONE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST OF MONANGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 32' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	534895.9 5112974.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 38 68 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 41 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1976 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	August 14, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	37 Ft.	Other Special	N
49 Structure Length	80.05 Ft.	218 Channel Profile	1 48 05/21/2019
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/09/2018
	27.9 Ft.	213 Federal Aid Project Number	ROS-513(2)
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Carlson, Wegner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 11-122-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	640	100	640	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	97	29	3	1	0	0	0	0
1130/3:Cracking (RC and Other)	ft	1	0	0	100	1	0	0	0	0
Notes:CS 2 Crack center of pier on east side. - 8/14/2019										
215/1:Re Conc Abutment	ft	59	88	52	12	7	0	0	0	0
Notes:West abutment has total of 5 CS 2 cracks which 1 crack has CS 2 efflorescence and 1 other has CS 2 rust staining. The East abutment has a total of 4 CS 1 cracks. - 8/14/2019										
1120/1:Efflorescence/Rust Staining	ft	2	0	0	100	2	0	0	0	0
1130/1:Cracking (RC and Other)	ft	9	44	4	56	5	0	0	0	0
330/1:Metal Bridge Railing	ft	161	98	158	0	0	2	3	0	0
Notes:There are 2 bolts missing on the north rail posts and 1 bolt missing on the south post (south post is leaning). - 8/14/2019										
1020/1:Connection	ft	3	0	0	0	0	100	3	0	0
515/1:Steel Protective Coating	sq.ft	100	50	50	50	50	0	0	0	0
331/1:Re Conc Bridge Railing	ft	161	93	150	6	9	1	2	0	0
Notes:SE corner of rail has a CS 3 spall with CS 2 exposed rebar. NE corner has a CS 3 spall with CS 2 exposed rebar. South rail has 3' of CS 2 spall caused by blade. North rail has 5 CS1 cracks and 3 CS 2 Cracks. South rail has 1 CS 1 crack and 1 CS 2 crack. - 8/14/2019										
1080/1:Delamination/Spall/Patched Area	ft	5	0	0	60	3	40	2	0	0
1090/1:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
1130/1:Cracking (RC and Other)	ft	10	60	6	40	4	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor paint damage to bridge railing. 3 bolts missing in bridge railing and posts are tipping. - 8/14/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-123-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	KEYSTONE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 1 NORTH MONANGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 31' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	536687.6 5114010.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 29 52 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 17 32 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	31 Tons
Age and Service		Appraisal	
27 Yr Built	1924 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	50 30 Year of ADT 2018	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	3 SC - Unstable
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	January 03, 2018
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.6 Ft.	Other Special	N
48 Length of Max Span	26 Ft.	218 Channel Profile	1 48 05/21/2019
49 Structure Length	27.89 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	1.0 Ft Lt-Side	212 Structure Load Rated	03/13/2018
51 Bridge Rdwy Width - Curb to Curb		213 Federal Aid Project Number	FAP212
	23.0 Ft.	214 Delayed Inspection	Not Applicable
52 Deck Width	25.3 Ft.	216 Inspector	Rowell, Belanger
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	Navigation Data	
54 Min Vert Underclearance	0 Ft. 0 In.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
55 Min Lateral UnderClear. - Rt	99.9 Ft.	40 Navigation Horizontal Clearance	0 Ft.
	N Feature not hwy or RR	111 Pier or Abutment Protection	Unknown (NBI)
56 Min Lateral UnderClear. - Lt	0.0 Ft.	116 Minimum Navigation Vertical Clearance	Ft.
210 Culvert / 211 Description			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-123-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	710	83	589	17	121	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	167	0	0	88	147	12	20	0	0
1080/1:Delamination/Spall/Patched Area	ft	9	0	0	100	9	0	0	0	0
Notes: _										
1130/1:Cracking (RC and Other)	ft	112	0	0	82	92	18	20	0	0
Notes: _										
215/3:Re Conc Abutment	ft	49	0	0	0	0	100	49	0	0
1130/3:Cracking (RC and Other)	ft	49	0	0	0	0	100	49	0	0
Notes: _										
330/1:Metal Bridge Railing	ft	56	0	0	64	36	36	20	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	56	88	49	13	7	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	7	100	7	0	0	0	0	0	0
Notes: _										
8401/3:Wings	each	4	75	3	25	1	0	0	0	0

Remarks: NBI Remarks: Spalling thru-out structure. Exposed steel on east curb. West railing bent. Poor stream alignment. Road posted for 30 mph. Exposed rebar throughout structure exposed rebar west curb north end. .

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-125-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	MAPLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST OF MONANGO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 29' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	538647.6 5113018.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 31 56 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1994 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	70 Ft.	Other Special	N
49 Structure Length	74.15 Ft.	218 Channel Profile	1 48 05/21/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/06/1996
52 Deck Width	31.2 Ft.	213 Federal Aid Project Number	BRO-11(3)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Belanger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-125-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,314	40	926	60	1,388	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	1,388	0	0	100	1,388	0	0	0	0
104/1:Pre Clsd Box Girder	ft	295	100	295	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	1	100	1	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	148	100	148	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	148	100	148	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Erosion around NW wingwall. - 4/16/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-127-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	VAN METER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 3 SOUTH ELLENDALE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 57' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 26' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	542820.6 5088771.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 32 58 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2001 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	95 Ft.	Other Special	N
49 Structure Length	100.07 Ft.	218 Channel Profile	1 48 05/21/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/18/2001
	28.5 Ft.	213 Federal Aid Project Number	BRO-11(12)
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Wegner, Carlson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 11-127-23.0

[illegible]

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-127-23.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	VAN METER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 2 SOUTH ELLENDALE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 57' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 26' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	543064.7 5090035.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	9 No Deficiencies
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 28 52 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2006 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	August 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.5 Ft.	Underwater	N
48 Length of Max Span	94 Ft.	Other Special	N
49 Structure Length	98.10 Ft.	218 Channel Profile	1 48 05/21/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	05/01/2007
	28.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Wegner, Carlson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 11-127-23.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,030	87	2,637	13	393	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	1	0	0	100	1	0	0	0	0
Notes:1ft of spall on the East side fascia. - 8/7/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	392	0	0	100	392	0	0	0	0
Notes:4' wide abrasion along the centerline the length of the bridge. - 8/7/2019										
109/1:Pre Opn Conc Girder/Beam	ft	380	100	378	1	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:2ft of CS 2 spall on Beam 4, 15ft from south abutment. - 8/7/2019										
215/1:Re Conc Abutment	ft	64	100	64	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	1	100	1	0	0	0	0	0	0
Notes:1 CS1 crack on North abutment. - 8/7/2019										
330/1:Metal Bridge Railing	ft	196	96	189	0	0	4	7	0	0
1020/1:Connection	ft	4	0	0	0	0	100	4	0	0
Notes:3 ft of CS3 connection on East rail is damaged, 1 anchor bolt in the deck that holds the rail posts on is missing a nut. - 8/7/2019										
7000/1:Damage	ft	3	0	0	0	0	100	3	0	0
Notes:3 ft of damage on East metal bridge rail. - 8/7/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: New structure late fall of 2006. Damage to both south guardrail. - 8/7/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-127-24.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Major Collector
04 City	VAN METER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01124 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH 4 EAST ELLENDALE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	15.596	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 56' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 27' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	542378.6 5087165.0	Condition	
98 Border Bridge	46 South Dakota 50.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	000000007131000	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 29 52 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 17 31 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	47 Ft.	Other Special	N
49 Structure Length	100.07 Ft.	218 Channel Profile	1 48 05/20/2019
50 Curb/Sidewalk Widths	2.0 Ft Rt-Side	Chaining Date	None
	2.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/13/2018
52 Deck Width	32.5 Ft.	213 Federal Aid Project Number	CBRS-1124(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Wegner, Carlson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 11-127-24.0

[illegible]

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-128-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	MAPLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	SOUTHWEST OF FULLERTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 09' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 25' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	543823.9 5111322.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 27 49 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1998 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	15 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	84 Ft.	Other Special	N
49 Structure Length	85.96 Ft.	218 Channel Profile	1 48 05/21/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	04/21/1999
	28.5 Ft.	213 Federal Aid Project Number	DPI-0036(003)112
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger, Carlson, Wegner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-128-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,659	100	2,659	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	344	94	322	6	22	0	0	0	0
1120/1:Efflorescence/Rust Staining	ft	22	0	0	100	22	0	0	0	0
Notes: Located on beam 2 and 4. - 4/16/2019										
1130/1:Cracking (RC and Other)	ft	32	100	32	0	0	0	0	0	0
Notes: Located on Beams 2 and 4. - 4/16/2019										
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	171	100	171	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes: 3 spalls on NW wing 4"x4", 6"x12", and 8"x8". - 4/16/2019										

Remarks: Minor damage to NW wing. - 4/16/2019

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 11-128-10.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	88.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Major Collector
04 City	MAPLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01127 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF FULLERTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	9.298	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 08' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 25' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	544729.5 5110129.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 43 77 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1975 106 Yr Reconstructed	2019	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	5 Above Min Tolerable
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	282 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	14.00	71 Waterway Adequacy	8 Equal Desirable
19 Bypass, Detour Length	3 Miles	72 App. Rdwy. Alignment	8 Equal Desirable Crit
Geometric Data		36 Traffic Safety Features	1 1 1 1
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	5 Stable w/in footing
32 Approach Roadway Width	24 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	October 23, 2017
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	27.9 Ft.	Fracture Critical	N
48 Length of Max Span	40 Ft.	Underwater	N
49 Structure Length	89.90 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	218 Channel Profile	1 48 06/27/2019
	0.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	207 Transporter Erector Routes and Sites	-1
52 Deck Width	29.5 Ft.	212 Structure Load Rated	03/13/2018
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	CRS-46(7)
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Rowell, Belanger, Carlson
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 11-128-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/3:Pre Opn Conc Girder/Beam	ft	720	100	720	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	59	0	0	41	24	59	35	0	0
1080/3:Delamination/Spall/Patched Area	ft	31	0	0	0	0	100	31	0	0
Notes: _										
1090/3:Exposed Rebar	ft	4	0	0	0	0	100	4	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	24	0	0	100	24	0	0	0	0
Notes: _										
215/3:Re Conc Abutment	ft	59	54	32	12	7	34	20	0	0
1080/3:Delamination/Spall/Patched Area	ft	20	0	0	0	0	100	20	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	7	0	0	100	7	0	0	0	0
Notes: _										
330/1:Metal Bridge Railing	ft	180	100	180	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	180	98	177	2	3	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Moderate cracking and spalling through-out sub-structure. Exposed rebar on both abutments.**Alert Code 1:** Large spall areas in abutments. Large spall south side of south pier. Moderately diminished bearing area.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-128-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Major Collector
04 City	KENTNER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01127 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 SOUTH OF FULLERTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	6.099	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 05' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 25' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	544716.0 5104935.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1975 106 Yr Reconstructed	2019	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	5 Above Min Tolerable
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	282 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	14.00	71 Waterway Adequacy	8 Equal Desirable
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	6 Equal Min Criteria
Geometric Data		36 Traffic Safety Features	1 1 1 1
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	7 Countermeasures
32 Approach Roadway Width	24 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	August 15, 2019
34 Skew	15.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	27.9 Ft.	Fracture Critical	N
48 Length of Max Span	40 Ft.	Underwater	N
49 Structure Length	91.86 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	218 Channel Profile	1 48 07/03/2019
	0.7 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	207 Transporter Erector Routes and Sites	-1
52 Deck Width	29.9 Ft.	212 Structure Load Rated	03/13/2013
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	CRS-46(7)
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Carlson, Wegner
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 11-128-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	551	89	489	11	62	0	0	0	0
Notes:20' of CS4 has been patched and moved to CS3. - 8/15/2019										
1080/1:Delamination/Spall/Patched Area	ft	62	0	0	100	62	0	0	0	0
Notes:3 CS2 spalls at guardrail anchor east side span 1. 23 CS2 spalls on beams span 1. 1 CS2 spall at guardrail anchor west side span 2. 2 CS2 spalls at guardrail anchor east side span 2. 6 CS2 spalls on beams in span 2. 7 CS2 spalls on beams span 3. *20' of spalls in CS2 are areas that have been patched they were CS4 spalls before the repair. - 8/15/2019										
1110/1:Cracking (PSC)	ft	43	100	43	0	0	0	0	0	0
Notes:24 CS1 cracks midspan span 3 east of centerline at outside wheel path. 19 CS1 cracks midspan span 3 west of centerline at outside wheel path. - 8/15/2019										
210/3:Re Conc Pier Wall	ft	21	0	0	100	21	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	16	0	0	100	16	0	0	0	0
Notes:16' of CS3 has been patched and moved to CS2. - 8/15/2019										
1130/3:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
Notes:South pier has CS2 crack with efflorescence another 1' of CS crack. North Pier has 3' of CS2 longitudinal crack. - 8/15/2019										
215/1:Re Conc Abutment	ft	59	90	53	10	6	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes:4' of CS2 spall has been patched. - 8/15/2019										
1130/1:Cracking (RC and Other)	ft	3	33	1	67	2	0	0	0	0
Notes:South Abutment has 2' of CS2 cracks and 1' of CS1 cracks. - 8/15/2019										
330/1:Metal Bridge Railing	ft	184	100	184	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Bridge had some repair work done as of 2019 they also removed the conc. bridge rail. - 8/15/2019

Alert Code 1: 12' of new mortar between girds has failed (8' broken, 4' missing) - 8/15/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-128-15.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Major Collector
04 City	KENTNER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01127 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 5 NORTH ELLENDALE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	4.099	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 04' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 25' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	544707.9 5101919.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete continuous	61 Chan. & Chan. Protection	4 Protection Undermined
Slab		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 25 46 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1971 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	282 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 15, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	36 Ft.	Other Special	N
49 Structure Length	100.07 Ft.	218 Channel Profile	1 48 05/21/2019
50 Curb/Sidewalk Widths	2.6 Ft Rt-Side	Chaining Date	None
	2.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	27.9 Ft.	213 Federal Aid Project Number	ER-111(2)
52 Deck Width	32.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Carlson, Wegner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 11-128-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
38/1:Re Concrete Slab	sq.ft	3,283	0	0	73	2,387	27	896	0	0
Notes:1' of CS2 spall span 2, CS2 map cracking throughout bottom of slab, CS3 map cracking over both piers 16'x28',CS2 map cracking on top surface of slab, 50% of CS2 abrasion down center of bridge, along with pop out throughout the deck. Rust staining 1' span #1, 1' span #2, 2' span #3. - 8/15/2019										
1080/1:Delamination/Spall/Patched Area	sq.ft	1	0	0	100	1	0	0	0	0
1090/1:Exposed Rebar	sq.ft	1	0	0	100	1	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	0	0	0	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	3,281	0	0	73	2,385	27	896	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	0	0	0	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	66	0	0	100	66	0	0	0	0
Notes:North Pier: 12' Cs1 longitudinal crack, hairline map cracking whole length. South Pier: Hairline map cracking whole length. - 8/15/2019										
1130/3:Cracking (RC and Other)	ft	66	0	0	100	66	0	0	0	0
215/1:Re Conc Abutment	ft	66	0	0	92	61	8	5	0	0
Notes:South Abutment: 3' of CS2 cracks, 1' of CS2 efflorescence, 33' of CS2 hairline map cracking, 5' of CS3 scour (top of spread footing exposed starting to undermine.) North Abutment: 4' of CS2 cracks, 4' of CS2 efflorescence, 33' of CS2 hairline map cracking, and 14' of CS2 longitudinal crack. - 8/15/2019										
1120/1:Efflorescence/Rust Staining	ft	5	0	0	100	5	0	0	0	0
1130/1:Cracking (RC and Other)	ft	56	0	0	100	56	0	0	0	0
6000/1:Scour	ft	5	0	0	0	0	100	5	0	0
331/1:Re Conc Bridge Railing	ft	200	86	172	14	28	0	0	0	0
Notes:West Rail: 15' CS1 cracks, 10' CS2 cracks, 6' CS2 spall, and rust staining NW corner CS2. East Rail: 14' CS1 cracks, 9' CS2 cracks, 3' of CS2 spall. - 8/15/2019										
1080/1:Delamination/Spall/Patched Area	ft	9	0	0	100	9	0	0	0	0
1130/1:Cracking (RC and Other)	ft	48	60	29	40	19	0	0	0	0
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1130/1:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0

Remarks: Map cracking throughout deck. Roadway settlement both ends of bridge. Large crack in SW wing wall. Deck cracking over both piers. 8/2019 - SE guardrail end terminal damaged. - 8/15/2019

Alert Code 1: Scour SW corner undermining Abutment footing. - 8/15/2019

Alert Code 3: Concrete substructure is rated at a 5, but there is extensive scour that has exposed the top of footing and is being undermined there is no misalignment or settlement noted as of 8/15/2019. - 8/15/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-128-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	VAN METER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST OF ELLENDALE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 59' 40.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 25' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	544287.2 5093593.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	N N/A (NBI)
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2005 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	35.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.5 Ft.	Underwater	N
48 Length of Max Span	88 Ft.	Other Special	N
49 Structure Length	107.94 Ft.	218 Channel Profile	1 48 05/21/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	02/11/2004
	28.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Wegner, Carlson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-128-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,348	100	3,343	0	0	0	5	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	5	0	0	0	0	100	5	0	0
Notes:2.5'x1' CS3 spall on SW corner of deck at end; 2'x1' CS3 spall on NE corner of deck at end. - 8/7/2019										
520/1:Conc Re Prot Sys	sq.ft	3,348	100	3,348	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	419	100	419	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	96	96	92	4	4	0	0	0	0
1130/2:Cracking (RC and Other)	ft	6	33	2	67	4	0	0	0	0
Notes:West Abutment: 2 CS1 and 1 CS2 cracks; East Abutment: 3 CS 2 cracks - 8/7/2019										
330/1:Metal Bridge Railing	ft	216	100	216	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-129-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	KENTNER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 2 NORTH ELLENDALE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 02' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 24' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	545754.9 5098413.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 35 63 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2002 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 15, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	74 Ft.	Other Special	N
49 Structure Length	78.08 Ft.	218 Channel Profile	1 48 05/21/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	04/23/2003
	28.5 Ft.	213 Federal Aid Project Number	BRO-11(013) SITE 1
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-129-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,411	100	2,411	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	299	100	299	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	157	100	157	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-130-10.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Major Collector
04 City	MAPLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01112 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH 1 EAST FULLERTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	32.393	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 08' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 23' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	546703.0 5109698.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 26 47 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	420 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	9.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 15, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	47 Ft.	Other Special	N
49 Structure Length	100.07 Ft.	218 Channel Profile	1 48 05/21/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	02/18/1997
	27.9 Ft.	213 Federal Aid Project Number	BRS-1112(51)
52 Deck Width	33.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Carlson, Wegner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 11-130-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,305	0	0	100	3,305	0	0	0	0
Notes:CS2 Map cracking bottom of deck spans 1 and 2, CS2 abrasion 21'x100' center of deck, and CS2 map cracking the whole surface of deck. - 8/15/2019										
1130/1:Cracking (RC and Other)	sq.ft	3,305	0	0	100	3,305	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	0	0	0	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	400	100	398	1	2	0	0	0	0
Notes:Span 1 beam #2 exposed rebar near west abutment, beam #3 has 1' of CS2 longitudinal crack mid span. - 8/15/2019										
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
1090/1:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
210/3:Re Conc Pier Wall	ft	33	100	33	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	96	63	5	3	0	0	0	0
Notes:West abutment: 3 CS1 and 2 CS2 cracks. East abutment: 6 CS1 cracks. - 8/15/2019										
1130/1:Cracking (RC and Other)	ft	12	75	9	25	3	0	0	0	0
331/1:Re Conc Bridge Railing	ft	200	93	185	8	15	0	0	0	0
Notes:South Rail: 30 CS1 cracks, post #1 and #2 have CS2 spalls, post #3 has CS2 delamination. North Rail: 41 CS1 cracks. - 8/15/2019										
1080/1:Delamination/Spall/Patched Area	ft	15	0	0	100	15	0	0	0	0
1130/1:Cracking (RC and Other)	ft	71	100	71	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 3"x5" piece of concrete chipped out of north beam over pier. Map cracking on deck, minor cracking on west abutment and moderate erosion on NE wingwall. 8/2019 - Poor stream alignment up stream. Metal rail added. Siltation down stream in channel, appears water over road spring of 2019 drains in beams leaking. - 8/15/2019

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SEC 409

Structure Number: 11-136-03.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Major Collector
04 City	WRIGHT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01104 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	7 NORTH 7 WEST OAKES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	38.192	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 14' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 16' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	556347.3 5121008.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 29 52 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 31 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1972 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	55 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	15 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	34 Ft.	90 Date of Last Inspection	October 24, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	50 Ft.	Other Special	N
49 Structure Length	122.05 Ft.	218 Channel Profile	1 48 05/23/2019
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/13/2018
	28.2 Ft.	213 Federal Aid Project Number	CS-963(2)
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Carlson, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 11-136-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	1,220	100	1,220	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	59	48	28	39	23	14	8	0	0
1080/3:Delamination/Spall/Patched Area	ft	8	0	0	0	0	100	8	0	0
Notes: _										
1090/3:Exposed Rebar	ft	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	ft	19	0	0	100	19	0	0	0	0
Notes: _										
215/1:Re Conc Abutment	ft	59	75	44	25	15	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
1130/1:Cracking (RC and Other)	ft	14	0	0	100	14	0	0	0	0
Notes: _										
330/1:Metal Bridge Railing	ft	213	86	184	0	0	14	29	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	243	94	228	6	15	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
1130/1:Cracking (RC and Other)	ft	14	0	0	100	14	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor collision damage on north railing. Cracking/spalling on both piers towards the top. Minor cracking on curbing. Four bars exposed east pier east side.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-140-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	JAMES RIVER VALLEY T	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 4 WEST OF OAKES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 12' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 10' 23.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	563792.3 5116921.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 26 47 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	33 Ft.	90 Date of Last Inspection	April 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	49 Ft.	Other Special	N
49 Structure Length	129.92 Ft.	218 Channel Profile	1 48 05/23/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	12/12/1996
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	BRO-11(7)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Belanger, Belanger, Carlson, Wegner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-140-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,897	100	3,897	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	518	100	518	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	59	100	59	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	59	97	57	3	2	0	0	0	0
1130/1:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
331/1:Re Conc Bridge Railing	ft	259	96	248	4	11	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:3"x6" spall on east bridge rail 12' from south end of bridge. - 4/16/2019										
1130/1:Cracking (RC and Other)	ft	26	62	16	39	10	0	0	0	0
Notes:Cracking throughout bridge rail. - 4/16/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: No splice plates joining e railing. - 4/16/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-140-24.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Major Collector
04 City	PORT EMMA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01124 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 5 SOUTH LUDDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	28.994	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 56' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 10' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	564039.7 5087283.8	Condition	
98 Border Bridge	46 South Dakota 50.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	000000007266000	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Slab		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	5	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 25 46 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 15 28 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1974 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	8 Desirable Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	47 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	January 02, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.8 Ft.	Underwater	N
48 Length of Max Span	45 Ft.	Other Special	N
49 Structure Length	208.99 Ft.	218 Channel Profile	1 48 07/03/2019
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	32.2 Ft.	213 Federal Aid Project Number	BRS-8510(2) SD PLANS
52 Deck Width	34.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-140-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
38/1:Re Concrete Slab	sq.ft	7,255	7	496	70	5,087	23	1,672	0	0
1130/1:Cracking (RC and Other)	sq.ft	6,767	0	8	75	5,087	25	1,672	0	0
Notes: _										
205/3:Re Conc Column	each	8	100	8	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	69	100	69	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	9	100	9	0	0	0	0	0	0
Notes: _										
234/3:Re Conc Pier Cap	ft	141	100	141	0	0	0	0	0	0
1130/3:Cracking (RC and Other)	ft	5	100	5	0	0	0	0	0	0
Notes: _										
330/1: Metal Bridge Railing	ft	417	0	0	100	417	0	0	0	0
1000/1:Corrosion	ft	417	0	0	100	417	0	0	0	0
Notes: _										
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes: _										
331/1:Re Conc Bridge Railing	ft	417	96	401	4	16	0	0	0	0
1130/1:Cracking (RC and Other)	ft	191	92	175	8	16	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor cracking and spalling on deck. Moderate erosion 3 corners of structure,encroaching rdwy. Minor collision damage to NE guardrail minor rust on bridge rail.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-142-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	DIVIDE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 2 WEST OF OAKES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 11' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 07' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	567114.4 5116305.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 43 78 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 26 47 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1995 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 24, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	56 Ft.	Other Special	N
49 Structure Length	155.84 Ft.	218 Channel Profile	1 48 05/23/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/13/2018
	28.5 Ft.	213 Federal Aid Project Number	BRO-11(9)
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Carlson, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-142-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,822	100	4,799	0	5	0	18	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	2	0	0	100	2	0	0	0	0
Notes: _										
1130/1:Cracking (RC and Other)	sq.ft	21	0	0	14	3	86	18	0	0
Notes: _										
104/1:Pre Clsd Box Girder	ft	604	100	604	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	56	100	56	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	325	99	323	1	2	0	0	0	0
1020/1:Connection	ft	2	0	0	100	2	0	0	0	0
Notes: _										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
1080/3:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes: _										

Remarks: 24 cracks on south outside edge of slab by bridge guard rail posts. Two areas are delaminated. One area is spalled. 21 cracks on north outside edge of slab by bridge guard rail posts. Four areas are delaminated. One area spalled.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-142-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	HUDSON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH 3 WEST OF OAKES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 03' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 08' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	565984.6 5101781.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 35 63 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1982 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	65 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 16, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	55 Ft.	Other Special	N
49 Structure Length	142.06 Ft.	218 Channel Profile	1 48 05/23/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/13/2018
	28.2 Ft.	213 Federal Aid Project Number	BRO-11(6)
52 Deck Width	32.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Carlson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-142-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,596	95	4,366	5	230	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	230	0	0	100	230	0	0	0	0
Notes: _										
104/1:Pre Clsd Box Girder	ft	568	100	568	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	66	100	66	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	66	89	59	11	7	0	0	0	0
1130/3:Cracking (RC and Other)	ft	7	0	0	100	7	0	0	0	0
Notes: _										
331/1:Re Conc Bridge Railing	ft	285	99	282	1	3	0	0	0	0
1130/1:Cracking (RC and Other)	ft	13	77	10	23	3	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor cracking on bridge rail posts. Minor popouts on deck. Popout on east abutment under north beam. No splice plate on e rail.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-143-10.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Major Collector
04 City	CLEMENT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01112 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF OAKES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	45.690	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 08' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 06' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	568343.1 5109867.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 52 94 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 31 56 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	420 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	13 Miles	36 Traffic Safety Features	0 0 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	October 24, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.8 Ft.	Underwater	N
48 Length of Max Span	57 Ft.	Other Special	N
49 Structure Length	167.98 Ft.	218 Channel Profile	1 48 05/23/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/13/2018
	32.2 Ft.	213 Federal Aid Project Number	CBRS-1112(54)
52 Deck Width	34.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Carlson, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-143-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	5,716	99	5,651	1	40	0	25	0	0
1130/1:Cracking (RC and Other)	sq.ft	281	86	241	14	40	0	0	0	0
Notes: _										
1190/1:Abrasion(PSC/RC)	sq.ft	25	0	0	0	0	100	25	0	0
Notes: _										
104/1:Pre Clsd Box Girder	ft	840	100	840	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	69	100	69	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	69	100	69	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	2	100	2	0	0	0	0	0	0
Notes: _										
330/1:Metal Bridge Railing	ft	335	100	335	0	0	0	0	0	0
Notes: _										
331/1:Re Conc Bridge Railing	ft	335	99	332	1	3	0	0	0	0
1130/1:Cracking (RC and Other)	ft	11	73	8	27	3	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Damage to SW concrete end post.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-143-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	69 Bureau, Reclamation
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	BEAR CREEK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	OAKES CANAL 0-1	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 SOUTH OF OAKES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 06' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 06' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	568659.3 5107230.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 26 48 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1984 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	June 28, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	76 Ft.	Other Special	N
49 Structure Length	80.05 Ft.	218 Channel Profile	1 48 07/01/1994
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/06/1996
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	BUR. OF REC. WO-1
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Belanger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-143-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
13/1:Pre Concrete Deck	sq.ft	2,226	100	2,222	0	2	0	2	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	2	0	0	0	0	100	2	0	0
1090/1:Exposed Rebar	sq.ft	2	0	0	100	2	0	0	0	0
104/1:Pre Clsd Box Girder	ft	302	100	302	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	61	100	61	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	159	85	135	15	24	0	0	0	0
1130/1:Cracking (RC and Other)	ft	24	0	0	100	24	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: SOUTH END OF DECK HAS BEEN DAMAGED WITH STEEL EXPOSED. Piling exposed both abutments.
6/2018 - 2 BEM'S down.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-145-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	DIVIDE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 N 1 E OF OAKES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 14' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 04' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	571742.4 5121156.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 52 95 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1976 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	January 02, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	20.0 Ft.	Underwater	N
48 Length of Max Span	25 Ft.	Other Special	N
49 Structure Length	50.00 Ft.	218 Channel Profile	1 06/06/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/11/2012
	28.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	98 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-145-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	350	100	350	0	0	0	0	0	0
206/1:Timber Column	each	12	42	5	33	4	25	3	0	0
1140/1:Decay/Section Loss	each	3	0	0	67	2	33	1	0	0
Notes: _										
1170/1:Split/Delamination (Timber)	each	4	0	0	50	2	50	2	0	0
Notes: _										
216/1:Timber Abutment	ft	60	78	47	0	0	22	13	0	0
1160/1:Crack (Timber)	ft	13	0	0	0	0	100	13	0	0
Notes: _										
330/1:Metal Bridge Railing	ft	100	100	100	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	100	96	96	4	4	0	0	0	0
1130/1:Cracking (RC and Other)	ft	8	50	4	50	4	0	0	0	0
Notes: _										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-145-13.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	69 Bureau, Reclamation
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	RIVERDALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	OAKES CANAL W0-2	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH & 1 EAST OAKES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 05' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 04' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	571085.1 5105049.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 28 51 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 15 29 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	52 Ft.	Other Special	N
49 Structure Length	56.10 Ft.	218 Channel Profile	1 48 05/23/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/13/2018
	28.2 Ft.	213 Federal Aid Project Number	BUR. OF REC. WO-2
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Carlson, Wegner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-145-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,588	100	1,588	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	210	100	210	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	61	100	61	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	113	90	102	10	11	0	0	0	0
1130/1:Cracking (RC and Other)	each	11	0	0	100	11	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: BRIDGE IN EXCELLENT SHAPE. 3 bridge end markers are missing. - 10/30/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-145-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	69 Bureau, Reclamation
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	RIVERDALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	OAKES CANAL W0-3	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH & 1 EAST OF OAKES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 04' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 04' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	571094.4 5103444.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 26 48 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	19 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	61 Ft.	Other Special	N
49 Structure Length	63.98 Ft.	218 Channel Profile	1 48 07/01/1993
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/13/2018
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	BUR. OF REC. WO-3
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Carlson, Wegner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-145-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,786	100	1,786	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	243	100	243	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	128	93	119	7	9	0	0	0	0
1130/1:Cracking (RC and Other)	each	9	0	0	100	9	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 2 bridge end markers are missing. - 10/30/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-145-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	69 Bureau, Reclamation
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	RIVERDALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	OAKES CANAL W0-4	102 Direction of Traffic	2 2-way traffic
09 Location	5 SOUTH & 1 EAST OF OAKES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 03' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 05' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	570363.1 5101830.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 45 81 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 46 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	42 Ft.	Other Special	N
49 Structure Length	44.95 Ft.	218 Channel Profile	1 48 07/01/1993
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.5 Ft.	212 Structure Load Rated	03/13/2018
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	BUR. OF REC. WO-5
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Carlson, Wegner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-145-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	362	100	362	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	91	100	91	0	0	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: North 2 bridge end markers are missing. SW guardrail end treatment is damaged. - 10/30/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-145-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	69 Bureau, Reclamation
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Dickey	26 Functional	Rural, Local
04 City	RIVERDALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	OAKES CANAL W0-5	102 Direction of Traffic	2 2-way traffic
09 Location	6 SOUTH OF OAKES	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 03' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 05' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	570369.6 5100216.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 45 81 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 46 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.5 Ft.	Underwater	N
48 Length of Max Span	42 Ft.	Other Special	N
49 Structure Length	44.95 Ft.	218 Channel Profile	1 48 07/01/1993
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/13/2018
	29.5 Ft.	213 Federal Aid Project Number	BUR. OF REC. WO-4
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Carlson, Wegner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 11-145-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	362	100	362	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	91	96	87	4	4	0	0	0	0
1130/1:Cracking (RC and Other)	each	29	86	25	14	4	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Both north bridge end markers are down - 10/30/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 12-144-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	51.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Divide	26 Functional	Rural, Local
04 City	LONG CREEK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 EAST OF CROSBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 54' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 05' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	200119.8 5425397.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 31 56 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 34 Tons
208 Dk Overburden	100 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1960 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	January 10, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	18 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	21.0 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	Y 48 07/13/2015
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/07/2017
	21.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Ralphs
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 12-144-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	217	0	0	0	0	100	217	0	0
206/1:Timber Column	each	22	0	0	100	22	0	0	0	0
216/1:Timber Abutment	ft	46	0	0	100	46	0	0	0	0
235/1:Timber Pier Cap	ft	52	0	0	50	26	31	16	19	10
331/1:Re Conc Bridge Railing	ft	62	97	60	3	2	0	0	0	0
4000/3:Settlement	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: NBI Remarks: Minor damage to west end of south curb. All channel beams have minor spalls and random hairline cracks. The first channel beam from the north has minor spalls with exposed rebar. SE piling leaning to west, minor loss of bearing with pile cap. 12/2016: The east timber cap is crushed and failed at north end over the last 3 piling for 10LF. Substructure is old timber; no signs posted for load. Orange and white PVC end markers all four corners. 7/2018- East bound traffic posted at 5 tons, west bound also posted but posting is 2 miles away. Posted sign needs to be moved closer to bridge. 1/2019- NE Corner settling, timber cap has deteriorated.

Alert Code 3: The east timber cap is crushed and failed at north end over the last 3 piling for 10LF. 11/19/2013 - East abutment cap bows outward approximately 3-4" at center. Structure appears to be settling slightly at the NE corner. 1/13/2015-The east timber abutment cap is crushed at the north end and bows out 4" at center. Structure continues to appear to be settling at NE corner.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 12-145-05.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	70.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Divide	26 Functional	Rural, Local
04 City	LONG CREEK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 3 NORTH NOONAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 56' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 04' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	201774.9 5428536.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	204 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	40 Tons
27 Yr Built	1969 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	January 10, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	18 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	Y 48 07/13/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	212 Structure Load Rated	08/07/2017
52 Deck Width	25.3 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, Ralphs
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 12-145-05.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	207	0	0	0	0	0	0	100	207
206/1:Timber Column	each	22	0	0	100	22	0	0	0	0
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
235/1:Timber Pier Cap	ft	52	0	0	100	52	0	0	0	0
331/1:Re Conc Bridge Railing	ft	52	0	0	100	52	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Corrosion stains evident on bottom of all channel beams. Some patching done on bottom of channel beams. South curb has minor damage for one third of its length. Moderate erosion behind all wingwalls has been filled. 10/30/16 Erosion on NW corner near approach. 12/2016: Orange and white PVC end markers all four corners. 7/2018: Cracking on top of channel beam, 1/2019: Minor to moderate spalls and exposed rebar on all channel beams

Alert Code 3: Minor to moderate random and diagonal cracks on all channel beams and diaphragms. Minor to moderate spalls and exposed rebar on third channel beam from south on west end and 2nd beam from the north east end

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-103-33.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01303 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 S 19 W DUNN CENTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 19' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 02' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	195036.1 5249666.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	95 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	13 Ft.	Other Special	N
49 Structure Length	26.90 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CRS-0408(53)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 13X5X74' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-103-33.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	148	100	148	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 9/21/2016 - cattle panel North side. Tree growing in East Barrel.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-104-39.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	KNIFE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 12 WEST MANNING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 14' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 00' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	196443.1 5240314.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2005 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	22.97 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 11X8X48' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-104-39.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	96	100	96	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: 11/2010 - 10'X 20' scour hole in SW bank. 6/20/2014 - Some minor spalls on wings. 9/21/2016 - Minor erosion behind NW & SW wings.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-105-55.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01307 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GREEN RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST 2 NORTH NEW HRADEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.099	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 01' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 59' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	196766.7 5215368.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	9 No Deficiencies
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	2 Concrete Continuous	Load Rating and Posting	
	01 Slab	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	2	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	4 Low Slump Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 18 34 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2014 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	June 11, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	32.0 Ft.	Underwater	N
48 Length of Max Span	106 Ft.	Other Special	N
49 Structure Length	106.44 Ft.	218 Channel Profile	1 48 06/19/2017
50 Curb/Sidewalk Widths	1.6 Ft Rt-Side	Chaining Date	None
	1.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/14/2018
	32.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	35.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 13-105-55.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	3,743	95	3,543	5	200	0	0	0	0
1120/3:Efflorescence/Rust Staining	sq.ft	100	0	0	100	100	0	0	0	0
1130/3:Cracking (RC and Other)	sq.ft	100	0	0	100	100	0	0	0	0
520/3:Conc Re Prot Sys	sq.ft	3,743	100	3,743	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	425	100	425	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	71	100	71	0	0	0	0	0	0
310/1:Elastomeric Bearing	each	12	100	12	0	0	0	0	0	0
321/1:Re Conc Approach Slab	sq.ft	100	50	50	50	50	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	50	0	0	100	50	0	0	0	0
331/1:Re Conc Bridge Railing	ft	212	91	192	9	20	0	0	0	0
1130/1:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/2014 - Bridge replaced with a new structure. 9/20/2016 - SW wing is built ahead of the abutment wall, due to a sheet pile contractor did not remove. Approach slabs & bridge ends are cracked fairly extensive. 6-11-18- All wings appear to be pulling away from structure slightly.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-106-34.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE KNIFE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	10 WEST 3 SOUTH KILLDEER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 19' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 58' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	200097.8 5248412.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2011 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	12/12/2011
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0013(023)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 10' X 10' X 44' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-106-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	88	100	88	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-106-51.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01352 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 N 5 W OF NEW HRADEC	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.500	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 04' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 58' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	197841.1 5220344.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1992 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	90 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 11, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.98 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CRS-1352(56)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 9X6X60' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-106-51.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	121	100	121	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor hairline cracks on north and south parapets. 11/2010 - Minor hairline cracks on north wings.
6/20/2014 - Some erosion west of box culvert in ditch.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-108-38.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01307 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	KNIFE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 9 WEST MANNING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	20.996	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 15' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 56' 52.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	201325.0 5241266.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 29 53 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1993 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	9 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	44 Ft.	Other Special	N
49 Structure Length	118.11 Ft.	218 Channel Profile	1 48 06/19/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	12/13/1996
52 Deck Width	30.8 Ft.	213 Federal Aid Project Number	BRC-1307(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 13-108-38.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,649	100	3,649	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	472	100	472	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	62	100	62	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	236	100	236	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	1	0	0	100	1	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Anchor bolts on 5 rail posts are too short, see photo for view of one of the posts. Minor cracking on deck. 11/2010 - A few cracks with efflorescent staining under deck. Also scour hole forming at SW corner under bridge. 8/7/2012 - Hairline cracking on deck under the metal rail. 9/21/2016 - Road construction at bridge guardrail will be replaced after or new placed. Fence across channel both east and west.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-110-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 7 WEST KILLDEER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 23' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 54' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	205107.0 5255470.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1992 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	7 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	22.97 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-13(6)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 11X7X66' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-110-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/2:Re Conc Culvert Precast	ft	131	100	131	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-110-37.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE KNIFE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 6 WEST MANNING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 16' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 53' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	205739.0 5242531.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2008 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0013(021)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12'X 10'X 52' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-110-37.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	104	100	104	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 6/20/2014 - Erosion beginning at NE corner of parapet.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-110-38.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01336 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE KNIFE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 6 WEST MANNING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 16' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 53' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	206180.5 5242458.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2008 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	18.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X10X53' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-110-38.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	106	100	106	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks. 6/20/2014 - Sediment build up in channel.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-110-39.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01336 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	KNIFE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 6 WEST OF MANNING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.800	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 15' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 53' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	206097.7 5240691.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 28 51 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1999 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	55 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	96 Ft.	Other Special	N
49 Structure Length	100.07 Ft.	218 Channel Profile	1 48 06/19/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/26/2000
52 Deck Width	30.8 Ft.	213 Federal Aid Project Number	BRC-1336(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-110-39.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,089	100	3,089	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	400	100	400	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	69	100	69	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	200	100	200	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	200	100	200	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Some bridge rail bolts not long enough, coated with epoxy type material. 9/21/2016 - Fence across channel both east and west.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-110-46.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	57.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 NORTH 1 WEST NEW HRADEC	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 08' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 54' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	203972.0 5228114.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 11 19 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 6 11 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	21 Tons
Age and Service		Appraisal	
27 Yr Built	1990 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	24 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	7 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 11, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.3 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	Y 48 10/11/2011
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	22.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 13-110-46.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	603	100	603	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	312	0	0	0	0	100	312	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
215/1:Re Conc Abutment	ft	49	96	47	4	2	0	0	0	0
1130/1:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
332/1:Timb Bridge Railing	ft	49	82	40	18	9	0	0	0	0
1140/1:Decay/Section Loss	ft	9	0	0	100	9	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor hairline cracking on wings and both abutments. A spall area on SE wing and abutment, see pictures. Honey combing on both abutments. 6/20/2014 - 7th beam under deck is bowed south. 9/21/2016 - West footing exposed. Utility pipe is running under bridge, along 1st I Beam from south. 6-11-18-replaced with 2 box culverts. 12x14 and 10x12 west culvert brand new , east culvert looks repurposed stamped 1995. east culvert has spalling & exposed rebar on both ends possibly from transport. 10-31-18- is now 2 box culverts east box 72.7 long, 8.4 high, 9.3 wide, west box 72.7 long, 8.4 high, 15.3 wide, 7' between them. Boxes with rip rap SwW corner has erosion started 9' deep x 12' long x 5' wide 11/2018 - Removed from inventory.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-110-57.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GREEN RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH NEW HRADEC	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 59' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 53' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	204628.5 5211064.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	6	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	11 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	June 11, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	4 Ft.	Other Special	N
49 Structure Length	95.14 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
SIX, 1-3X30' CMP & 5-4X30' RCP		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-110-57.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/2:Re Conc Culvert Precast	ft	180	0	0	100	180	0	0	0	0
1010/2:Cracking	ft	20	0	0	100	20	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	20	0	0	100	20	0	0	0	0
1220/2:Deterioration (Other)	ft	140	0	0	100	140	0	0	0	0
8402/2:Headwalls	each	2	50	1	50	1	0	0	0	0
1090/2:Exposed Rebar	each	1	0	0	100	1	0	0	0	0

Remarks: 6/20/2014 - Debris buildup at pipe end west side. 6/20/2014 - Bank erosion SE side. 6/20/2014 - Numerous cracks on concrete driving surface. Also diaphragms are cracked in between pipe.

Alert Code 1: 11/2010 - RCP CRACKED AND EXPOSED REBAR ON ENDS.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-111-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	70.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST OF KILLDEER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 22' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 52' 60.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	206857.0 5253826.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 17 31 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 12 23 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	201 Gravel/Dirt	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1932 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 07, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.0 Ft.	Other Special	N
48 Length of Max Span	27 Ft.	218 Channel Profile	1 48 06/13/2017
49 Structure Length	60.04 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	03/15/2018
51 Bridge Rdwy Width - Curb to Curb	22.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	23.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 13-111-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,453	0	0	100	1,453	0	0	0	0
1180/1:Abrasion	sq.ft	1,453	0	0	100	1,453	0	0	0	0
111/1:Timber Open Girder	ft	600	0	0	100	600	0	0	0	0
1140/1:Decay/Section Loss	ft	600	0	0	100	600	0	0	0	0
206/1:Timber Column	each	15	0	0	100	15	0	0	0	0
1140/1:Decay/Section Loss	each	15	0	0	100	15	0	0	0	0
216/1:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
1140/1:Decay/Section Loss	ft	52	0	0	100	52	0	0	0	0
235/1:Timber Pier Cap	ft	79	0	0	100	79	0	0	0	0
1140/1:Decay/Section Loss	ft	79	0	0	100	79	0	0	0	0
332/1:Timb Bridge Railing	ft	121	0	0	100	121	0	0	0	0
1140/1:Decay/Section Loss	ft	121	0	0	100	121	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1140/1:Decay/Section Loss	each	4	0	0	100	4	0	0	0	0

Remarks: NBI Remarks: Center timber pier has 3 broken sway braces Tops of timber piling on wings starting to decay, none are covered. 9/21/2016 - SE wing leaning toward stream.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-111-51.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01352 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSSIAN SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 NORTH 1 EAST NEW HRADEC	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.499	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 04' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 52' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	205820.2 5219961.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1984 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	90 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 11, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	37.07 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBRS-1352(54)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 12X6X54' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-111-51.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	161	100	161	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor cracking at SW corner of wing and parapet.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-112-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	63.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH 5 WEST KILLDEER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 21' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 51' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	208988.4 5252931.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 14 26 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 9 18 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	07 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	24 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 07, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.0 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 06/13/2017
49 Structure Length	60.04 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	03/15/2018
51 Bridge Rdwy Width - Curb to Curb	22.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	23.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 13-112-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,442	100	1,442	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	1,442	100	1,442	0	0	0	0	0	0
111/1:Timber Open Girder	ft	600	90	540	10	60	0	0	0	0
1160/1:Crack (Timber)	ft	60	0	0	100	60	0	0	0	0
206/1:Timber Column	each	15	87	13	13	2	0	0	0	0
1160/1:Crack (Timber)	each	2	0	0	100	2	0	0	0	0
216/1:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	79	100	79	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	121	0	0	100	121	0	0	0	0
1180/1:Abrasion	ft	121	0	0	100	121	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: One rail post is broken. Sway bracing on pier piling, is broken, see pictures. 11/2010 - Erosion along south abutment.. 6/23/2014 - SW corner of abutment and along wing wall is eroding. Advancing behind abutment. 6/23/2014 - Erosion at south abutment. Exposing bottom of abutment. Some erosion behind abutment at the bottom.

Alert Code 1: One stringer on north span and one stringer south span is is cracked and repaired with a u shaped clamp.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-112-52.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	80.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSSIAN SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 4 NORTH NEW HRADEC	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 03' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 50' 52.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	207777.3 5218256.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 19 35 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 11 21 Tons
Dk Protect	None	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	204 Gravel/Dirt	209 Posted in "Tons"	12 Tons
Age and Service		Appraisal	
27 Yr Built	1989 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	24 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 11, 2018
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 07/10/2017
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	08/26/2016
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 13-112-52.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	721	0	0	100	721	0	0	0	0
1180/1:Abrasion	sq.ft	721	0	0	100	721	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	420	0	0	0	0	100	420	0	0
1000/1:Corrosion	ft	390	0	0	0	0	100	390	0	0
1900/1:Distortion	ft	30	0	0	0	0	100	30	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3430/1:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	0	0	100	100	0	0
215/1:Re Conc Abutment	ft	49	90	44	10	5	0	0	0	0
1130/2:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Outside c-iron stringer is bowed south. The cracks on east abutment from structures to floor, size .50mm. 6/20/2014 - Water seeping under 3rd girder from north. 6/20/2014 - Minor cracking on wing.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-114-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GUMBO CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 2 NORTH KILLDEER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 24' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 48' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	212378.5 5256781.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1978 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.1 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	SOS-13(2)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X5X70' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-114-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	141	86	121	14	20	0	0	0	0
4000/2:Settlement	ft	20	0	0	100	20	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Joint opening is one inch at barrel sections. 6/23/2014 - Sediment building up in channel and box culvert.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-114-39.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01340 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	KNIFE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 1 NORTH MANNING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	6.199	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 14' 29.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 47' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	212754.9 5238978.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 32 58 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1987 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	107 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	25.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	37 Ft.	Other Special	N
49 Structure Length	109.91 Ft.	218 Channel Profile	1 48 07/05/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/13/1996
	28.2 Ft.	213 Federal Aid Project Number	CBRS-1340(51)
52 Deck Width	31.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 13-114-39.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,466	100	3,466	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	440	100	440	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	66	100	66	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	220	100	220	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	220	100	220	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Checked anchor bolts on railing and found 3 posts that have low bolts. 11/2010 - Some hairline cracking on deck. Also efflorescent staining showing under bridge. 11/2012 - SE corner of bridge rail damaged. Was hit by truck. Larson went out to bridge to look at it on request by county. 6/23/2014 - SE corner of bridge rail repaired. 6-7-18- Fence across north & south side collecting debris

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-117-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	EAST OF KILLDEER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 22' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 44' 23.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	217685.9 5253290.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 32 59 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1989 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	50 Ft.	Other Special	N
49 Structure Length	54.13 Ft.	218 Channel Profile	1 48 06/13/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/25/1996
	28.2 Ft.	213 Federal Aid Project Number	BRO-13(5)
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 13-117-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,733	100	1,733	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	217	100	217	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	108	100	108	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	108	98	106	2	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
8398/1:Slope Protection	each	1	0	0	100	1	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Seven railing posts have too low anchor bolts. 11/2010 -Some minor hairline cracks on deck. 12/8/2014 - Undermining has started on east and west abutments. 12/8/2014 - Approaches to bridge have been paved. Concrete curb has also been added on the north sides of bridge. 9/22/2016 - Spalls on rail north both ends.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-117-30.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST OF KILLDEER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 22' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 44' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	217896.5 5253684.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2007 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.7 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	44.95 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	AC-BRO-0013(017)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 14 X 8 X 54'RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-117-30.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	162	99	161	1	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: 9/22/2016 - East side clogged by tumble weeds, caught in fence across opening. 6-7-18- 1' spall on SW wing backside/top. Minor hair line cracking on east wings.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-117-30.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 1 NORTH KILLDEER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 22' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 44' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	217914.4 5254063.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2007 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.7 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	50.85 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	AC-BRO-0013(017)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD, 12 X 7 X 54' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-117-30.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	216	99	213	1	3	0	0	0	0
1130/1:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: 6/19/2014 - Center diaphragm has carcking both sides. 9/22/2016 - Fence across east side catching debris and causing sediment build up at opening.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-119-45.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CROOKED CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 SOUTH 3 EAST OF MANNING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 09' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 41' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	220033.0 5230069.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 38 68 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 24 44 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	24 Tons
Age and Service		Appraisal	
27 Yr Built	1972 106 Yr Reconstructed	1997	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	4 Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT	2018	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	June 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	18.4 Ft.	Underwater	N
48 Length of Max Span	33 Ft.	Other Special	N
49 Structure Length	35.11 Ft.	218 Channel Profile	1 48 09/30/2014
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	18.7 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	20.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 13-119-45.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	700	93	650	7	50	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	299	0	0	100	299	0	0	0	0
1000/1:Corrosion	ft	299	0	0	100	299	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/1:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	0	0	100	100	0	0
206/1:Timber Column	each	10	50	5	50	5	0	0	0	0
1180/1:Abrasion	each	5	0	0	100	5	0	0	0	0
216/1:Timber Abutment	ft	49	51	25	49	24	0	0	0	0
1140/1:Decay/Section Loss	ft	24	0	0	100	24	0	0	0	0
235/1:Timber Pier Cap	ft	49	0	0	100	49	0	0	0	0
1140/1:Decay/Section Loss	ft	49	0	0	100	49	0	0	0	0
332/1:Timb Bridge Railing	ft	69	0	0	51	35	49	34	0	0
1140/1:Decay/Section Loss	ft	69	0	0	51	35	49	34	0	0
8401/1:Wings	each	4	50	2	50	2	0	0	0	0
1130/1:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0

Remarks: 6/19/2014 - Band erosion east side of bridge. 6/19/2014 - Some minor roadway erosion at SE corner of abutment. 6/19/2014 - Some wood bridge planks have missing pieces of wood. 9/22/2016 - The east outside driving plank is rotted on north end and misaligned and loose on south end. Water extends out to be partially in front of wings.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-122-43.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01323 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	KNIFE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 7 EAST MANNING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	17.596	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 11' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 37' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	224904.8 5232797.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 26 47 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1984 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	14 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	86 Ft.	Other Special	N
49 Structure Length	90.88 Ft.	218 Channel Profile	1 48 06/27/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	03/06/1996
52 Deck Width	33.1 Ft.	213 Federal Aid Project Number	CRS-1323(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-122-43.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,992	100	2,992	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	456	100	456	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	180	100	180	0	0	0	0	0	0
8398/1:Slope Protection	each	1	0	0	100	1	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-122-45.3

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01323 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CROOKED CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 5 SOUTH MANNING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	15.897	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 10' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 37' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	224797.3 5230261.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 30 54 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	June 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	39 Ft.	Other Special	N
49 Structure Length	98.10 Ft.	218 Channel Profile	1 48 06/27/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/13/1996
	28.2 Ft.	213 Federal Aid Project Number	CBRS-1323(53)
52 Deck Width	33.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-122-45.3

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,251	100	3,251	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	397	100	397	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	66	100	66	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	197	100	197	0	0	0	0	0	0
8398/2:Slope Protection	each	1	0	0	100	1	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Concrete railing does not have the steel splice plates at the open joints. .8/17/2012 - Hairline cracking on outer sides of bridge curb. 6/19/2014 - Some minor cracks on deck. Also some efflorescent staining under deck.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-122-49.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01323 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DEEP CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 9 SOUTH MANNING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	11.697	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 06' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 37' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	224486.9 5223419.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 32 58 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	78 Ft.	Other Special	N
49 Structure Length	82.02 Ft.	218 Channel Profile	1 48 06/27/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/06/1996
	28.2 Ft.	213 Federal Aid Project Number	CBRS-1323(52)
52 Deck Width	33.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-122-49.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,713	100	2,713	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	328	100	328	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	164	100	164	0	0	0	0	0	0
8398/2:Slope Protection	each	1	0	0	100	1	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 01/26/2009 - Conduit on east side of bridge rail. 9/22/2016 - Some efflorescent staining under deck.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-123-32.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01323 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	SOUTH EDGE DUNN CENTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	28.494	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 20' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 37' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	226477.6 5249772.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1976 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	37.07 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	HHS-621(2)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
TRIPLE, 12'X54' SPP			

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-123-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/2:Steel Culvert	ft	161	100	161	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0

Remarks: NBI Remarks: Some scour around ends of pipe, inlet end, no rip rap in place. Guardrail posts missing - loose cable. 9/22/2016 - Bank has eroded back toward road with some undercutting. West end of northern most 2 barrels has damage. Spirals crimped and crooked at ends.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-123-41.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	STRAY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 1 SOUTH MANNING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 12' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 37' 23.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	225657.8 5235176.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2010 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 10' X 6'X 66'		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-123-41.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	132	100	132	0	0	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: New box in 2010. 6/19/2014 - Erosion in ditches east of box culve 9/22/2016 - Major erosion at NE corner. Water coming off hills has washed into east barrel and left 6 foot deep trenches approx. 5 feet wide.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-124-38.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 8 EAST OF MANNING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 15' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 36' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	227306.8 5239935.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2005 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X4X48' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-124-38.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	96	100	96	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 9/22/2016 - Banks are becoming eroded by outsides of corners of box.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-124-43.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CROOKED CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH 8 EAST OF MANNING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 10' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 36' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	226916.4 5231759.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 26 47 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1995 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	11 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	70 Ft.	Other Special	N
49 Structure Length	71.85 Ft.	218 Channel Profile	1 48 06/27/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.5 Ft.	212 Structure Load Rated	03/06/1996
52 Deck Width	30.8 Ft.	213 Federal Aid Project Number	BRO-13(7)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-124-43.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	624	100	624	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	276	100	276	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	151	100	151	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Most railing anchor bolts are too short. 11/2010 - Some minor cracking on deck. Also efflorescent staining appearing under deck.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-125-50.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01352 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DEEP CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 11 WEST MARSHALL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	21.196	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 05' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 34' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	229222.8 5221285.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	June 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	82 Ft.	Other Special	N
49 Structure Length	85.96 Ft.	218 Channel Profile	1 48 06/27/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/07/1996
	28.2 Ft.	213 Federal Aid Project Number	CBRS-1323(54)
52 Deck Width	33.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lutes, Martin
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-125-50.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,842	100	2,842	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	344	100	344	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	171	99	169	1	2	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/2010 - Some minor cracking on deck. Also efflorescent staining under deck at north end. 6-4-18- Collision damage ne corner of rail 1'x6"

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-125-53.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 SOUTH 10 WEST MARSHALL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 02' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 34' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	228457.8 5215715.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2004 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0013(015)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Lutes, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14X6X48' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-125-53.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	96	100	96	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 6/19/2014 - Fence on north side of box connected to wings going across barrel.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-127-51.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	46.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DEEP CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 WEST 4 SOUTH MARSHALL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 04' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 31' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	232439.0 5220102.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 21 38 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 12 23 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	04 Tons
Age and Service		Appraisal	
27 Yr Built	1957 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	3 30 Year of ADT 2018	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 04, 2018
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.1 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 07/10/2017
49 Structure Length	33.14 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/26/2016
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lutes, Martin
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 13-127-51.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	592	100	592	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	299	0	0	0	0	100	299	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
215/1:Re Conc Abutment	ft	36	0	0	69	25	31	11	0	0
1080/1:Delamination/Spall/Patched Area	ft	36	0	0	69	25	31	11	0	0
332/1:Timb Bridge Railing	ft	66	100	66	0	0	0	0	0	0
8401/1:Wings	each	4	0	0	75	3	0	0	25	1
1130/1:Cracking (RC and Other)	each	1	0	0	0	0	0	0	100	1

Remarks: NBI Remarks: 6/17/2014 - Concrete delamination and exposed piling NW corner of abutment. 6/17/2014 - Erosion of river bank SW side. 6/17/2014 - Erosion of river bank NW side. Also debris along river bank. 9/26/2016 - New deck placed along with timber curb. Wing footings exposed at North wings. 6-4-18- Erosion se bank

Alert Code 1: 11/2010 - East & West abutments spalling and delaminating.

Alert Code 2: 11/2010 - Large vertical crack 1/2" wide on SW wing. Misaligned at crack 2016

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-128-28.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01329 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF NORTH CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 2 WEST OF WERNER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	33.593	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 24' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 30' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	235738.0 5256671.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	80 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	9 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	AHL-1329(54)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
TRIPLE, 9X6X56' RCB			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-128-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	167	100	167	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/2010 - Minor cracking on inner walls of barrels. 7/11/2012 - Minor cracking SW wing.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-130-28.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01330 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 7 WEST HALLIDAY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	14.997	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 24' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 27' 40.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	238846.9 5255494.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	21 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	25.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	33.14 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CRS-1330(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 9X6X65' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-130-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	194	100	194	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/2010 - Minor cracking on inner walls of barrels. Wings have minor cracking and parapet connections.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-130-29.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01329 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF NORTH CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH OF WERNER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	30.593	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 23' 40.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 27' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	238863.8 5254793.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2000 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	80 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRC-1329(60)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X7X56' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-130-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	112	100	112	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: 7/11/2012 - Minor hairline cracking at parapets.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-130-46.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DEEP CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 WEST OF MARSHALL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 08' 27.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 28' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	236318.1 5226666.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1997 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	11 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	83 Ft.	Other Special	N
49 Structure Length	83.99 Ft.	218 Channel Profile	1 48 07/06/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/24/1997
	28.5 Ft.	213 Federal Aid Project Number	BRO-13(8)
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lutes, Martin
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-130-46.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,594	100	2,594	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	335	100	335	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	167	100	167	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Some anchor bolts on rail posts are too short:see photos. 11/2010 - Minor cracking on deck.
Efflorescent staining appearing under deck. 6/17/2014 - Some embankment erosion upstream and down stream.
9/26/2016 - NE guardrail damaged. Trees overgrowing bridge at all corners.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-130-46.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01329 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	KNIFE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST OF MARSHALL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	10.198	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 08' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 27' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	237422.7 5226821.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 28 52 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	9 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	35.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	50 Ft.	Other Special	N
49 Structure Length	133.86 Ft.	218 Channel Profile	1 48 07/06/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	12/16/1996
52 Deck Width	31.2 Ft.	213 Federal Aid Project Number	CBRS-1329(59)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Lutes, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 13-130-46.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,144	100	4,144	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	676	100	676	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	62	100	62	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	269	100	269	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	269	100	269	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Some anchor bolts on rail posts are too short-see picture. 11/2010 - Some minor cracking on deck and curb. Efflorescent staining appearing under deck. Concrete pedestals under bridge rail posts deteriorating. 6/17/2014 - Some efflorescent staining under deck. River channel east of bridge has portions of river bank sloughing off into channel. 9/26/2016 - Approx. 7 of the pedestals under the rail posts have spalled out around the anchor bolts. .

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-130-46.2

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01329 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 1 NORTH MARSHALL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	9.898	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 09' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 27' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	237606.5 5228149.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	9 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	June 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.98 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	ER-1329(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Lutes, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X6X42' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-130-46.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	85	0	0	100	85	0	0	0	0
8401/2:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: NBI Remarks: Some hairline cracks on parapets & wingwalls and on end of middle wall west end. 9/26/2016 - Middle wall both ends have cracks vertically, open approx. 1/2". SW and NE wing have longitudinal cracks along wing approx. 1 foot from the top.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-130-49.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01352 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DEEP CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 WEST 2 SOUTH MARSHALL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	25.894	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 05' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 28' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	236282.5 5221815.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 17 31 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1993 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	9 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	86 Ft.	Other Special	N
49 Structure Length	89.90 Ft.	218 Channel Profile	1 48 07/10/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/07/1996
52 Deck Width	30.8 Ft.	213 Federal Aid Project Number	BRC-1352(58)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Lutes, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-130-49.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,788	100	2,788	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	361	100	361	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	180	100	180	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Utility running along bottom rail south side. 11/2010 / Some minor cracking on deck. Also efflorescent staining appearing under deck.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-131-31.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	76.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01329 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	EAST OF WERNER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	27.894	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 21' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 27' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	238952.8 5250657.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 10 19 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	80 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.6 Ft.	Underwater	N
48 Length of Max Span	82 Ft.	Other Special	N
49 Structure Length	85.96 Ft.	218 Channel Profile	1 48 07/10/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	26.9 Ft.	212 Structure Load Rated	11/25/1996
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	CBRS-1329(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Lutes, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-131-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,842	100	2,842	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	344	100	344	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	171	100	171	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/2010 - Minor cracking on deck.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-134-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 1 WEST HALLIDAY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 21' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 22' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	245139.2 5251267.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2013 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	0 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	May 31, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	44.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/21/2013
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0013(024)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE PC RCB 14 X 14 X 58'		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-134-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	174	100	174	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/21/2013 - Bridge replaced with a triple box. 9/27/2016 - Single box parapet is approx. 2 inches lower than double.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-135-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	NORTHWEST SIDE HALLIDAY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 21' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 22' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	246713.3 5250512.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2005 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 31, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	0.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0013(019)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14X12X48' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-135-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	96	100	96	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 7/11/2012 - Minor cracking on top side of parapet. 6/16/2014 - Patch on SE wing. 9/27/2016 - Patch on NE wing.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-136-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	HALIDAY CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	NORTHWEST HALLIDAY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 21' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 20' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	247413.3 5250283.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1989 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	90 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 31, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	7 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 7X6X65' RCB W/DROP INLET		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-136-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	194	0	0	100	194	0	0	0	0
8401/2:Wings	each	4	50	2	50	2	0	0	0	0
1130/2:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
8403/1:Drop Inlet	each	1	0	0	100	1	0	0	0	0

Remarks: NBI Remarks: Steel ice noses starting to show signs of rusting. Hairline crack at wing and parapet corners. Steel railing on top of parapet and wings on the north side are damage due to high water & ice chunks. 9/27/2016 - The NE steel railing has been removed and cattle panels placed in line with the top rail. 11/2010 - Efflorescent staining at NE barrel and wing.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-137-39.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01344 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 SOUTH OF HALLIDAY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.400	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 14' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 19' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	248395.3 5237372.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2002 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 31, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	SC-1340(53)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X4X48' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-137-39.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/4:Re Conc Culvert Precast	ft	95	100	95	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-141-34.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	73.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 1 WEST DODGE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 19' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 13' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	256071.1 5246357.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel continuous	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 21 39 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 10 19 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	15 Tons
27 Yr Built	1951 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	May 31, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	20.3 Ft.	Underwater	N
48 Length of Max Span	44 Ft.	Other Special	N
49 Structure Length	120.08 Ft.	218 Channel Profile	1 48 07/10/2017
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	20.3 Ft.	212 Structure Load Rated	08/26/2016
52 Deck Width	22.3 Ft.	213 Federal Aid Project Number	ERS-47(1)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 13-141-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,659	0	0	100	2,659	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	2,659	0	0	100	2,659	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	361	100	361	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	43	100	43	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	43	98	42	2	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
330/1:Metal Bridge Railing	ft	240	50	121	50	119	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	50	50	50	50	0	0	0	0
331/1:Re Conc Bridge Railing	ft	240	100	240	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Center span has a slight sag in it. 6/16/2014 - Some minor spalling on south backwall where beams tie in. 6/16/2014 - Some efflorescent staining under deck.

Alert Code 1: 11/2010 - NUMEROUS CRACKS ON DECK SOME ARE 1/8" TO 1/4" WIDE.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-141-47.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01341 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	KNIFE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH 5 EAST MARSHALL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.499	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 07' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 13' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	255141.2 5224299.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 46 82 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 28 51 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	65 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	11 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	May 31, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	50 Ft.	Other Special	N
49 Structure Length	120.08 Ft.	218 Channel Profile	1 48 06/28/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/15/2018
	28.5 Ft.	213 Federal Aid Project Number	BRS-1341(51)
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 13-141-47.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	1,201	100	1,199	0	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	67	2	0	0	0	0
210/1:Re Conc Pier Wall	ft	62	100	62	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	240	58	140	42	100	0	0	0	0
1000/1:Corrosion	ft	100	0	0	100	100	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	58	58	42	42	0	0	0	0
3430/1:Ox Flm/Txt Adhr(Stl Prot Coat)	sq.ft	42	0	0	100	42	0	0	0	0
331/1:Re Conc Bridge Railing	ft	240	34	81	58	139	8	20	0	0
1090/1:Exposed Rebar	ft	20	0	0	0	0	100	20	0	0
1130/1:Cracking (RC and Other)	ft	139	0	0	100	139	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	0	0	100	1	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Placed rip rap at ditch bottom on NW corner of bridge. Minor cracking and popouts on top of deck. 6/16/2014 - Surface rust on metal railing. 9/27/2016 - Water has carried dead trees and other debris around north pier and washed out dirt at abutment at least 2 feet deep. 8/24/17 - Removed alert 3 from structure, Riprap has been placed under North abutment to fix the scour hole and erosion. See pictures.

Alert Code 1: Bridge rail posts damaged on west side by ice.11/2010 - CONCRETE CURB HAS CRACKING AND EXPOSED REBAR.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-142-52.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH KNIFE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 SOUTH 6 EAST MARSHALL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 03' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 12' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	256091.2 5216134.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 18 34 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1982 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	May 31, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	82 Ft.	Other Special	N
49 Structure Length	84.97 Ft.	218 Channel Profile	1 48 06/28/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/07/1996
	28.2 Ft.	213 Federal Aid Project Number	BRO-13(4)
52 Deck Width	33.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 13-142-52.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,820	100	2,820	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	344	100	344	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	141	100	141	0	0	0	0	0	0
8398/2:Slope Protection	each	1	0	0	100	1	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/2010 - Numerous cracks on deck. Efflorescent staining appearing under deck. 9/27/2016 - There are erosion holes in all ditches approx. 20 feet away from bridge. NE one is over 6 feet deep.

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SEC 409

Structure Number: 13-143-39.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Dunn	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01341 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH OF DODGE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	14.497	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 14' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 12' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	257226.5 5237056.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	65 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	May 31, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.4 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.98 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X6X60' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 13-143-39.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	121	97	117	3	4	0	0	0	0
1130/2:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
8401/2:Wings	each	4	50	2	50	2	0	0	0	0
1130/2:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0

Remarks: NBI Remarks: Stream channel west side of box has a sharp alignment to opening, and no problems evident. NW parapet wall and wing are cracking at seam. 11/2010 - SE/NW wing has minor cracking. 5-31-18- Minor cracking on inner wall

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-101-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Eddy	26 Functional	Rural, Local
04 City	GRANDFIELD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	7 WEST 1 SOUTH SHEYENNE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 49' 17.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 16' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	479337.7 5296490.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 26 48 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 29 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	0 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	8 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 07, 2019
32 Approach Roadway Width	21 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.6 Ft.	Other Special	N
48 Length of Max Span	59 Ft.	218 Channel Profile	Y 48 06/07/2015
49 Structure Length	61.02 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	03/16/2018
51 Bridge Rdwy Width - Curb to Curb	22.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-101-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	489	100	489	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	49	100	49	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	121	100	121	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1080/3:Delamination/Spall/Patched Area	each	4	0	0	100	4	0	0	0	0
Notes:Spall on all 4 wings on the top corners. - 10/7/2019										

Remarks: NBI Remarks: Vertical curve to the south. SW and NW bridge end markers missing. No railing. 10/9/2013 - Spall outs on all 4 wings on the top by the deck. 10/21/2015 - Still missing bridge end markers on the SW and NW corners. 10/2/2017 - 10/7/2019 -Still missing bridge end markers on the West side. - 10/7/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-101-08.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Eddy	26 Functional	Rural, Major Collector
04 City	MUNSTER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01401 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N ROCKFORD CANAL NR2-4	102 Direction of Traffic	2 2-way traffic
09 Location	3 N 7 W NEW ROCKFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.099	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 16' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	479314.4 5286491.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 29 53 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1989 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	29 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	90 Ft.	Other Special	N
49 Structure Length	94.16 Ft.	218 Channel Profile	1 48 06/17/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/07/1996
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-101-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,863	100	2,863	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	377	100	377	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	187	100	187	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Vehicle damage to all end treatments. Bureau of reclamation no. Nr2-4. 10/10/2013 - All end treatments are still damaged. 10/7/2019 - slight efflorescence present between substructure and superstructure do to seepage between the joint . - 10/7/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-101-09.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Eddy	26 Functional	Rural, Major Collector
04 City	MUNSTER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01401 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST 3 NORTH NEW ROCKFD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.026	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 16' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	479312.1 5285935.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 29 53 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1970 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	29 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	59 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 06/17/2019
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/16/2017
	28.2 Ft.	213 Federal Aid Project Number	ER-114(11)
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-101-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
215/3:Re Conc Abutment	ft	59	95	56	5	3	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:NW corner of North Abutment. - 10/7/2019										
1090/3:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
Notes:NW Corner of North Abutment. - 10/7/2019										
330/2:Metal Bridge Railing	ft	121	100	121	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
331/2:Re Conc Bridge Railing	ft	121	100	121	0	0	0	0	0	0
8398/1:Slope Protection	each	2	0	0	50	1	50	1	0	0
6000/1:Scour	each	2	0	0	50	1	50	1	0	0
Notes:High water so unable to see scour. - 10/7/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Two spalls on bridge deck are patched with asphalt. Spall on abutment face of nw corner of north abutment underneath beamseat of box girder. Northwest corner has a 2 ft diameter broken section of concrete on the north abutment. - 10/7/2019

Alert Code 1: Tilt on the Abutments is - SW - 4.5% and SE - 3.8% Tilt back. NE - 1.8 % and NW 1.1% tilt back. - 10/7/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-104-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Eddy	26 Functional	Rural, Local
04 City	MUNSTER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N ROCKFORD CANAL NR2-5	102 Direction of Traffic	2 2-way traffic
09 Location	2 N 4 W NEW ROCKFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 12' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	484140.9 5285187.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 28 51 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1989 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	91 Ft.	Other Special	N
49 Structure Length	94.16 Ft.	218 Channel Profile	1 48 06/17/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	05/30/1996
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-104-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,874	100	2,874	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	377	100	377	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	187	100	187	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Bureau of reclamation no. Nr2-5 vehicle damage to end treatment all four corners. 10/10/2013 -
End treatments are all still damaged. - 10/7/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-104-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	77.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Eddy	26 Functional	Rural, Local
04 City	MUNSTER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST NEW ROCKFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 12' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	484132.5 5282497.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	69 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	41 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	7 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 08, 2019
32 Approach Roadway Width	21 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	18.7 Ft.	Other Special	N
48 Length of Max Span	33 Ft.	218 Channel Profile	1 48 06/17/2019
49 Structure Length	36.09 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	08/26/2016
51 Bridge Rdwy Width - Curb to Curb	19.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 14-104-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	721	40	289	60	432	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	432	0	0	100	432	0	0	0	0
Notes:The deck is wearing away. - 10/8/2019										
107/2:Steel Opn Girder/Beam	ft	325	0	0	0	0	100	325	0	0
1000/2:Corrosion	ft	325	0	0	0	0	100	325	0	0
Notes:Full of rust. - 10/8/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	39	0	0	0	0	100	39	0	0
1080/3:Delamination/Spall/Patched Area	ft	32	0	0	0	0	100	32	0	0
Notes:Full of delamination on both Abutments. - 10/8/2019										
1090/3:Exposed Rebar	ft	7	0	0	0	0	100	7	0	0
Notes:Exposed rebar on both Abutments. - 10/8/2019										
331/2:Re Conc Bridge Railing	ft	72	0	0	100	72	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	72	0	0	100	72	0	0	0	0
Notes:Railing are delamination. - 10/8/2019										
8401/3:Wings	each	4	0	0	0	0	100	4	0	0
1080/3:Delamination/Spall/Patched Area	each	4	0	0	0	0	100	4	0	0
Notes:Concrete is deteriorating. - 10/8/2019										

Remarks: NBI Remarks: Bridge deck has scaling and pullouts. Scaling and spalling of concrete on abutment face and wingwalls. Rebar exposed on wingwalls and abutments. No bridge end markers. 10/2/2017 - 10/8/2019 -Still no bridge end markers. - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-105-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Eddy	26 Functional	Rural, Local
04 City	GRANDFIELD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST SHEYENNE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 49' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 12' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	484439.8 5297701.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	—	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 29 53 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2011 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	90 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	57 Ft.	Other Special	N
49 Structure Length	123.00 Ft.	218 Channel Profile	1 48 06/19/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/29/2011
	28.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-105-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,751	100	3,751	0	0	0	0	0	0
520/1:Conc Re Prot Sys	sq.ft	3,751	100	3,751	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	492	100	492	0	0	0	0	0	0
210/2:Re Conc Pier Wall	ft	61	100	61	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	64	100	64	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	246	100	246	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/12/2011 - Bridge replaced with new structure in 2011. 10/2/2017 - 10/7/2019 -Guardrail end terminal on the NW end is damaged. - 10/7/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-105-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Eddy	26 Functional	Rural, Local
04 City	MUNSTER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N ROCKFORD CANAL NR2-6	102 Direction of Traffic	2 2-way traffic
09 Location	2 N 3 W NEW ROCKFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 11' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	485747.5 5285064.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	MS 18 (HS 20) (live load for which structure was designated)
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 55 99 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 28 51 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1989 106 Yr Reconstructed -1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	1 0 0 1
19 Bypass, Detour Length	2 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 07, 2019
32 Approach Roadway Width	29 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	90 Ft.	218 Channel Profile	1 48 06/17/2019
49 Structure Length	94.16 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	05/30/1996
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-105-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,863	100	2,863	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	377	100	377	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	187	100	187	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Bureau of reclamation no. Nr2-6 - 10/7/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-107-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Eddy	26 Functional	Rural, Local
04 City	NEW ROCKFORD CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N ROCKFORD CANAL NR2-7	102 Direction of Traffic	2 2-way traffic
09 Location	1 W 2 N NEW ROCKFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 08' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	488955.9 5285593.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 28 51 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	90 Ft.	Other Special	N
49 Structure Length	94.16 Ft.	218 Channel Profile	1 48 06/17/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	05/30/1996
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-107-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,863	100	2,863	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	377	100	377	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	187	100	187	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Vehicle damage to all end treatments. Bureau of reclamation no. Nr2-7. 10/10/2013 - All end treatments are still damaged. - 10/7/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-108-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Eddy	26 Functional	Rural, Local
04 City	NEW ROCKFORD CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	NORTH NEW ROCKFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 08' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	488952.8 5281732.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2009 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 17, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	41.99 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0014(009)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD, 10'X 10'X 44' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 14-108-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	176	100	176	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/18/2009 - New box installed. NBI Remarks: West parapet 10' missing and 10' damaged. 10/10/2013 - Parapets are fixed and missing a tie anchor on the 2nd section in on the NE corner. 10/21/2015 - 09/17/2019 - Still missing the tie anchor on the 2nd section in on the NE corner. - 9/17/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-108-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	17.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Eddy	26 Functional	Rural, Local
04 City	NEW ROCKFORD CITY	37 Historical Significance	1 Br on Natl Reg Hist PI
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	NORTH NEW ROCKFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 08' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	489861.2 5281368.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	3 Serious
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	4 Steel Continuous	Load Rating and Posting	
		31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	4	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 0 0 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 0 0 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	03 Tons
Age and Service		Appraisal	
27 Yr Built	1904 106 Yr Reconstructed -1	67 Structural Condition	0 Closed
42 Type of Service	1 Highway - On	68 Deck Geometry	0 Bridge Closed
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	4 Tolerable
29 ADT	50 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	14.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	14 Ft. 1 In.	90 Date of Last Inspection	September 17, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	Y 24 10/21/2015
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.7 Ft.	Other Special	N
48 Length of Max Span	97 Ft.	218 Channel Profile	1 48 05/31/2017
49 Structure Length	169.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	17.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	12 Ft. 6 In.	216 Inspector	Horn, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 14-108-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	2,874	0	0	100	2,874	0	0	0	0
113/1:Steel Stringer	ft	1,529	0	0	100	1,529	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
120/1:Steel Truss	ft	194	0	0	100	194	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
152/1:Steel Floor Beam	ft	98	0	0	100	98	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
202/1:Steel Column	each	8	0	0	100	8	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	36	0	0	100	36	0	0	0	0
231/1:Steel Pier Cap	ft	72	0	0	100	72	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	341	0	0	100	341	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	341	0	0	94	321	0	0	6	20
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Bridge has been closed. Barricades installed on both bridge ends. 8/30/2005 - Bridge still closed 9/10/2007 - Bridge still closed 11/18/2009 - Bridge still closed. NBI Remarks: Posted for 3 tons. No advance warning signs. Rust on all steel members. Steel sheathing on nw pier column of truss is beginning to rupture and buckle. Vertical i-beam columns of approach span piers are slightly bent. No cracks seen on any fracture critical member. Bridge closed to traffic. December 31, 1997. Bridge still closed august 31, 2005 & 9/10/2007 & 11/2009. Bridge closed 10/26/11. Bridge still closed 10/10/2013. 10/21/2015, 9/26/2017, 9/17/2019 - 9/17/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-109-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Eddy	26 Functional	Rural, Local
04 City	NEW ROCKFORD CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect N ROCKFORD CANAL NR2-10		102 Direction of Traffic	2 2-way traffic
09 Location	1 E 2 N NEW ROCKFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 06' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	492185.3 5285623.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 28 51 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1989 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	90 Ft.	Other Special	N
49 Structure Length	94.16 Ft.	218 Channel Profile	1 48 06/17/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	05/30/1996
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-109-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,863	100	2,863	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	377	100	377	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	187	100	187	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Bureau of reclamation no. Nr2-10 - 10/7/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-111-13.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Eddy	26 Functional	Rural, Local
04 City	SUPERIOR TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 S 3 E NEW ROCKFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 39' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 03' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	495883.8 5278513.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1994 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	15 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	41.99 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-14(8)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD, 10X9X64' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-111-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	256	100	256	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: One foot of dirt in west barrel. Minor erosion behind the north wings. 10/7/2019 - Erosion still behind NE wing but is covered with vegetation. - 10/7/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-112-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Eddy	26 Functional	Rural, Local
04 City	SUPERIOR TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 S 3 E NEW ROCKFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 38' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 03' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	496161.2 5276902.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1984 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	15 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	3 SC - Unstable
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	61 Ft.	Other Special	N
49 Structure Length	64.96 Ft.	218 Channel Profile	1 48 07/11/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/07/1996
52 Deck Width	30.8 Ft.	213 Federal Aid Project Number	BRO-14(6)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-112-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,991	100	1,991	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	259	100	259	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	130	100	130	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Vertical curve both sides. Bridge end markers missing NE & NW corners. Scour behind nw wingwall. 10/7/2019 - Bridge end markers Still missing NE & NW corners. - 10/7/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-112-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Eddy	26 Functional	Rural, Local
04 City	SUPERIOR TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 S 4 E NEW ROCKFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 37' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 01' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	497631.1 5274972.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 15 27 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	15 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	72 Ft.	Other Special	N
49 Structure Length	76.12 Ft.	218 Channel Profile	1 48 07/11/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/07/1996
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	BRO-14(7)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-112-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,325	100	2,325	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	305	100	305	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	151	100	151	0	0	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
6000/1:Scour	each	2	0	0	100	2	0	0	0	0
Notes:Can't see scour due to High water levels. - 10/7/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/18/2009 - Scour 2' below south abutment exposing pile. NBI Remarks: Vertical curve at south end of bridge. nw & sw end markers missing. 10/21/2015 - NW & SW end markers missing. 10/7/2019 - NW & SW & NE bridge end markers missing. - 10/7/2019

Alert Code 1: Scour 2' below south abutment exposing piling. - 10/7/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-115-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Eddy	26 Functional	Rural, Local
04 City	PLEASANT PRAIRIE TOW	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 S 7 E NEW ROCKFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 35' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 58' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	502346.1 5271768.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1989 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	74 Ft.	Other Special	N
49 Structure Length	78.08 Ft.	218 Channel Profile	1 48 07/11/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/07/1996
	27.9 Ft.	213 Federal Aid Project Number	BRO-14(5)
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-115-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,390	100	2,390	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	312	100	312	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	157	100	157	0	0	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/1:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Riprap is settling along both abutments. - 10/7/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Horizontal curve north of bridge. Guardrail installed at nw corner only. Bridge end marker missing on ne & se corners. 10/9/2013 - Erosion behind NW and SW wings. 10/21/2015 - Erosion still not fixed on NW and SW wings and still missing NE and SE bridge end markers. 10-7-2019 - Bridge End markers still missing on the NE And SE corners and Erosion still exists behind the SW and NW wings. - 10/7/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-117-01.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Eddy	26 Functional	Rural, Major Collector
04 City	BUSH TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01404 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	8 EAST SHEYENNE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	18.796	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	lian Reservation Road (IRR)
16 Latitude	47d 50' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 56' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	504863.9 5297791.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 34 62 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1975 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	210 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	47 Ft.	Other Special	N
49 Structure Length	99.08 Ft.	218 Channel Profile	1 48 06/18/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/16/2018
	28.2 Ft.	213 Federal Aid Project Number	DPI-0177(001)145
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 14-117-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	991	100	991	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	0	0	100	30	0	0	0	0
1130/3:Cracking (RC and Other)	ft	30	0	0	100	30	0	0	0	0
Notes:Hairline to moderate cracks along wall. - 10/7/2019										
215/3:Re Conc Abutment	ft	59	68	40	32	19	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:West Abutment in 3 locations towards the North side. - 10/7/2019										
1090/3:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:NE corner of East Abutment. - 10/7/2019										
1130/3:Cracking (RC and Other)	ft	15	0	0	100	15	0	0	0	0
Notes:Moderate cracks on the NW end of West Abutment and NE end of East Abutment. - 10/7/2019										
331/2:Re Conc Bridge Railing	ft	197	100	196	1	1	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Spall on the SW end of railing. - 10/7/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:Moderate cracks in all 4 wings. - 10/7/2019										

Remarks: NBI Remarks: Small amount of debris north side of pier. Probed center pier found no scour. Channel scour along west bank south of bridge. A popout 1'x 2' on west abut exposing rebar under the 4th girder from the north. Horn Inspector 03/20/2012 10/9/2013 - Popout on West Abutment and wing corner north side. There is no longer Metal Rail Uncoated it has been replaced with New Concrete Barrier.(See Photo) 10/20/2015 - Popout on West Abutment and wing corner on the South side. - 10/7/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-122-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Eddy	26 Functional	Rural, Local
04 City	TIFFANY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	18 E 4 N NEW ROCKFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Indian Reservation Road (IRR)
16 Latitude	47d 45' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 50' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	511989.7 5288557.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 40 73 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 38 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	September 17, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	47 Ft.	Other Special	N
49 Structure Length	98.10 Ft.	218 Channel Profile	1 48 06/18/2019
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/16/2018
52 Deck Width	30.2 Ft.	213 Federal Aid Project Number	SOS-14(2)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-122-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	784	100	781	0	3	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:West side by abutment connection. - 9/17/2019										
1090/2:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:North east concrete open girder. - 9/17/2019										
210/3:Re Conc Pier Wall	ft	30	87	26	13	4	0	0	0	0
1130/3:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:Narrow to moderate cracking on top west end of piers. - 9/17/2019										
215/3:Re Conc Abutment	ft	59	98	58	2	1	0	0	0	0
1090/3:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:On center of north abutment top. - 9/17/2019										
330/2:Metal Bridge Railing	ft	197	100	197	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	197	100	197	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	50	2	25	1	25	1	0	0
Notes:State 2 north west narrow cracking on top wing. State3 medium cracking on northeast wing.09/17/2019 - 9/17/2019										
1130/3:Cracking (RC and Other)	each	2	0	0	50	1	50	1	0	0
Notes:Northwest state 2 north east state 3. - 9/17/2019										

Remarks: NBI Remarks: Structure located on horizontal curve. Minor cracking on all 4 wings. cracks top of west pier.
10/9/2013 - Debris in NW corner by North Abutment. Cracks on all 4 wings down the middle and minor on the sides. The NE wing is getting more advanced deterioration with bigger cracks on top third. - 9/17/2019

Alert Code 2: 10/9/2013 - Spall with exposed rebar on the North abutment. Rebar exposed on the NE corner of concrete open girder. - 9/17/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-127-03.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	88.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Eddy	26 Functional	Rural, Major Collector
04 City	EDDY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01427 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH WARWICK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.298	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	lian Reservation Road (IRR)
16 Latitude	47d 48' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 43' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	521138.7 5294701.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Steel continuous	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 26 48 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 16 29 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1959 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	September 17, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	55 Ft.	Other Special	N
49 Structure Length	149.93 Ft.	218 Channel Profile	1 48 06/18/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/26/2016
	24.0 Ft.	213 Federal Aid Project Number	CS-663(3)
52 Deck Width	28.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-127-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,349	100	4,349	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	449	100	449	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	59	100	59	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
311/2:Moveable Bearing	each	6	100	6	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
313/2:Fixed Bearing	each	6	100	6	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	299	99	296	0	1	1	2	0	0
7000/2:Damage	ft	3	0	0	33	1	67	2	0	0
Notes:NE corner has section loss for 2' and 1 foot damage in mid-bridge on the West side. - 9/17/2019										
8398/1:Slope Protection	each	4	100	4	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Vertical and horizontal curves north of bridge. - 9/17/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 14-129-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	68.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Eddy	26 Functional	Rural, Local
04 City	EDDY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 3 SOUTH WARWICK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	lian Reservation Road (IRR)
16 Latitude	47d 48' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 40' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	524333.5 5294380.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 18 33 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 13 24 Tons
Dk Protect	None	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	22 Tons
Age and Service		Appraisal	
27 Yr Built	1939 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	5 30 Year of ADT 2019	72 App. Rdwy. Alignment	3 Intolerable - Correct
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 17, 2019
32 Approach Roadway Width	19 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.6 Ft.	Other Special	N
48 Length of Max Span	29 Ft.	218 Channel Profile	1 48 06/18/2019
49 Structure Length	61.02 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	03/16/2018
51 Bridge Rdwy Width - Curb to Curb	22.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 14-129-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,475	0	0	100	1,475	0	0	0	0
1180/1:Abrasion	sq.ft	1,475	0	0	100	1,475	0	0	0	0
Notes:The whole deck is wearing. - 9/17/2019										
111/2:Timber Open Girder	ft	673	100	673	0	0	0	0	0	0
206/3:Timber Column	each	37	0	0	81	30	19	7	0	0
1140/3:Decay/Section Loss	each	7	0	0	0	0	100	7	0	0
Notes:Piling in the wings are decaying from the inside out. - 9/17/2019										
1150/3:Check/Shake	each	30	0	0	100	30	0	0	0	0
Notes:Natural wear due to ice and debris. - 9/17/2019										
216/3:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
235/3:Timber Pier Cap	ft	72	0	0	100	72	0	0	0	0
332/2:Timb Bridge Railing	ft	121	96	116	0	0	4	5	0	0
1140/2:Decay/Section Loss	ft	121	96	116	0	0	4	5	0	0
Notes:Various locations along the railing. - 9/17/2019										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
7000/3:Damage	each	4	0	0	100	4	0	0	0	0
Notes:Debris damage and rotting piling on wings. - 9/17/2019										

Remarks: NBI Remarks: No advance warning signs. No bridge end markers. bridge is located between two sharp horizontal curves. Wing piling rotting on west wingwalls. Two sets of three planks 3"x 12", installed longitudinally on the deck for wheel tracks. 9/17/2019 - No Bridge End Markers. - 9/17/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-102-37.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CATTAIL CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	19 WEST 2 SOUTH STRASBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 06' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 33' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	378960.6 5107354.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 30 54 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2002 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	95 Ft.	Other Special	N
49 Structure Length	96.13 Ft.	218 Channel Profile	1 48 05/12/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/03/2003
	28.5 Ft.	213 Federal Aid Project Number	BRO-15(010)
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-102-37.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,966	100	2,966	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	372	100	370	1	2	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Spalls on north end of east beam and 1 small spall on same beam but south end - 10/16/2019										
215/2:Re Conc Abutment	ft	64	100	64	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	192	100	192	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Three small spalls on east beam. Bridge rail anchor bolts loose, 2 on the west rail, 1 on the east. - 10/16/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-103-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	18 WEST OF STRASBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 07' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 32' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	380571.4 5109821.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	34 Ft.	90 Date of Last Inspection	October 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	46.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.98 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CDE-F111(80)152
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X4X48' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-103-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	95	100	95	0	0	0	0	0	0
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Banks slumping - 10/16/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/1:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: Some minor shrinkage cracks on headwalls. Box is precast concrete. - 10/16/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-105-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BADGER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8WEST 1NORTH OF HAZELTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 30' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 30' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	384505.0 5150843.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 30 54 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 22 40 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	124 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 08, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.4 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/17/2019
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	03/16/2018
51 Bridge Rdwy Width - Curb to Curb	19.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	21.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 15-105-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/2:Timber Slab	sq.ft	527	0	0	100	527	0	0	0	0
1180/2:Abrasion	sq.ft	527	0	0	100	527	0	0	0	0
Notes:Deck showing normal wear - 10/8/2019										
206/3:Timber Column	each	10	0	0	100	10	0	0	0	0
1180/3:Abrasion	each	10	0	0	100	10	0	0	0	0
Notes:Columns showing normal wear/abrasion - 10/8/2019										
216/3:Timber Abutment	ft	39	0	0	100	39	0	0	0	0
1180/3:Abrasion	ft	39	0	0	100	39	0	0	0	0
Notes:Abutment normal wear - 10/8/2019										
235/2:Timber Pier Cap	ft	49	49	24	51	25	0	0	0	0
1900/2:Distortion	ft	25	0	0	100	25	0	0	0	0
Notes:South abutment cap show distortion and rotating away and rest on ruffly half the colums - 10/8/2019										
332/2:Timb Bridge Railing	ft	49	0	0	100	49	0	0	0	0
1150/2:Check/Shake	ft	49	0	0	100	49	0	0	0	0
Notes:Railing showing checking - 10/8/2019										
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
1160/2:Crack (Timber)	each	1	0	0	100	1	0	0	0	0
Notes:SE wing has top 2 planks broke - 10/8/2019										
1180/2:Abrasion	each	3	0	0	100	3	0	0	0	0
Notes:All wings have normal wear to them - 10/8/2019										

Remarks: No end markers Ice damage to four planks ne corner of abutment minor. Top 2 planks of SE wing broken. County installed a retaining system (4 sets of brackets) to keep the laminated deck in place and are loose - 10/8/2019

Alert Code 1: Erosion at SW corner , 1' x 2' x 3'. - South Pier Cap is rotating away and resting on roughly half of the columns. - 10/8/2019

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SEC 409

Structure Number: 15-105-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	47.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	12 WEST OF TEMVIK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 22' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 31' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	383094.1 5136385.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Slab		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	M 13.5 (H 15) (live load for which structure was designated)
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 8 15 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 3 7 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	13 Tons
Age and Service		Appraisal	
27 Yr Built	1952 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	5 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 08, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.3 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 05/17/2019
49 Structure Length	63.98 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	20.0 Ft.	213 Federal Aid Project Number	ERS-55(1)
52 Deck Width	22.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-105-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
38/1:Re Concrete Slab	sq.ft	1,410	99	1,400	1	10	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	10	0	0	100	10	0	0	0	0
Notes:Crack under side deck east end bridge with efflorescence visible - 10/8/2019										
210/3:Re Conc Pier Wall	ft	43	100	43	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	43	100	43	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	128	100	128	0	0	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Visible minor crack on deck with efflorescence . New end markers installed, fence across south opening of bridge. - 10/8/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-107-09.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01510 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BADGER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 WEST 1 NORTH HAZELTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.899	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 30' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 27' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	387675.2 5150927.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 29 53 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1962 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	80 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	0.00	36 Traffic Safety Features	1 0 0 0
19 Bypass, Detour Length	8 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 08, 2019
32 Approach Roadway Width	28 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	26.2 Ft.	Other Special	N
48 Length of Max Span	53 Ft.	218 Channel Profile	1 48 05/17/2019
49 Structure Length	55.12 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.3 Ft Lt-Side	212 Structure Load Rated	03/16/2018
51 Bridge Rdwy Width - Curb to Curb		213 Federal Aid Project Number	CS-603(3)
	24.3 Ft.	214 Delayed Inspection	Not Applicable
52 Deck Width	29.2 Ft.	216 Inspector	McCloud, Jochim
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	Navigation Data	
54 Min Vert Underclearance	0 Ft. 0 In.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
55 Min Lateral UnderClear. - Rt	99.9 Ft.	40 Navigation Horizontal Clearance	0 Ft.
	N Feature not hwy or RR	111 Pier or Abutment Protection	Unknown (NBI)
56 Min Lateral UnderClear. - Lt	0.0 Ft.	116 Minimum Navigation Vertical Clearance	Ft.
210 Culvert / 211 Description			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-107-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	495	100	495	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	121	99	120	1	1	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:1x1 spall on east abutment under 1st beam - 10/8/2019										
331/2:Re Conc Bridge Railing	ft	112	100	112	0	0	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 1x1 Small spall NE end of east abutment under 1st beam. - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-107-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HORSE HEAD CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 SOUTH 9 WEST HAZELTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 24' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 28' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	387237.7 5140532.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 29 53 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	15 Tons
Age and Service		Appraisal	
27 Yr Built	1980 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	8 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 08, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	21.0 Ft.	Other Special	N
48 Length of Max Span	29 Ft.	218 Channel Profile	1 48 05/17/2019
49 Structure Length	33.14 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/07/2017
51 Bridge Rdwy Width - Curb to Curb	21.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-107-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	231	100	231	0	0	0	0	0	0
216/2:Timber Abutment	ft	43	100	43	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	43	100	43	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	66	100	66	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Reflectorized markers in place all corners but are not regulation size. One backing plank NW corner broken from ice damage. NW marker installed backwards - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-107-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	11 WEST 5 SOUTH OF LINTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 11' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 27' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	387018.6 5116155.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	2 Gravel/Dir	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	0 Tons
27 Yr Built	2011 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	October 15, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	29.00 Ft.	218 Channel Profile	1 48 05/17/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/17/2011
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 14' X 10' X 44' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-107-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	88	100	88	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-108-39.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	13 WEST 4 SOUTH STRASBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 04' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 26' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	388276.2 5103254.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 43 78 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 23 43 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1977 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	124 Miles	113 Scour Critical	7 Countermeasures
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 16, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	20.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	29.9 Ft.	Other Special	N
48 Length of Max Span	48 Ft.	218 Channel Profile	1 48 05/09/2019
49 Structure Length	49.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	03/19/2018
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	OS-15(1)-39
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-108-39.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	400	100	400	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	98	100	98	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	75	75	25	25	0	0	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	25	0	0	100	25	0	0	0	0
Notes:Oxide film on coating - 10/16/2019										
331/2:Re Conc Bridge Railing	ft	98	100	98	0	0	0	0	0	0
8398/2:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/2:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Some settling and washing at corners of wings and ditch bottom where watere runs to the creek - 10/16/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 4/3/17- Poor roadway alignment. Poor channel alignment. - 10/16/2019**Alert Code 1:** Erosion around all corners of bridge. Erosion is very minor at bridge corners. There is some down in the ditches but isn't affecting the bridge. - 10/16/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-108-40.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	13 WEST 4 SOUTH STRASBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 04' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 26' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	388596.8 5102891.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 43 78 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 23 43 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1977 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	8 Miles	113 Scour Critical	7 Countermeasures
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 16, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	29.9 Ft.	Other Special	N
48 Length of Max Span	48 Ft.	218 Channel Profile	1 48 05/09/2019
49 Structure Length	50.85 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	03/19/2018
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	OS-15(1)-40
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-108-40.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	407	100	405	1	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Spall on 3rd tee beam west end on north end of bridge - 10/16/2019										
215/3:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	102	100	102	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Rail coating showing signs of oxidizing - 10/16/2019										
331/2:Re Conc Bridge Railing	ft	102	93	95	0	0	7	7	0	0
1130/2:Cracking (RC and Other)	ft	7	0	0	0	0	100	7	0	0
Notes:Curbs cracked at the ends of the bridge - 10/16/2019										
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Scour taking place under NW curb at end of bridge - 10/16/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Erosion around all wings.* nw, se & sw curbs cracked at corners. 2 ft spall on third Tee beam from west - north end. - 10/16/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-109-41.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	12 WEST 6 SOUTH STRASBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 02' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 25' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	389679.5 5100005.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 49 88 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 29 53 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	210 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 16, 2019
32 Approach Roadway Width	21 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.7 Ft.	Other Special	N
48 Length of Max Span	20 Ft.	218 Channel Profile	1 48 05/09/2019
49 Structure Length	21.98 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	03/19/2018
51 Bridge Rdwy Width - Curb to Curb	19.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 15-109-41.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	431	95	409	5	22	0	0	0	0
1080/2:Delamination/Spall/Patched Area	sq.ft	22	0	0	100	22	0	0	0	0
Notes:Delamination and some spalling on under side of deck - 10/16/2019										
110/2:Re Conc Opn Girder/Beam	ft	112	0	0	100	112	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	112	0	0	100	112	0	0	0	0
Notes:Delamination / honey comb throughout most of the beams - 10/16/2019										
215/2:Re Conc Abutment	ft	43	0	0	0	0	100	43	0	0
1090/2:Exposed Rebar	ft	43	0	0	0	0	100	43	0	0
Notes:East back wall has some measurable section loss - 10/16/2019										
331/2:Re Conc Bridge Railing	ft	43	0	0	100	43	0	0	0	0
1190/2:Abrasion(PSC/RC)	ft	43	0	0	100	43	0	0	0	0
Notes:Both rails showing wear over time - 10/16/2019										
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
1130/2:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:NW has crack - 10/16/2019										

Remarks: Channel alignment poor. Large crack on top of NW wing. Erosion starting behind SE wing. - 10/16/2019

Alert Code 1: Concrete on both backwalls honeycombed. east backwall steel exposed with some section loss. ten inches of gravel on deck. scour along east backwall, 30' x 8' x 3'. Erosion starting around SE wing. - 10/16/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-110-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 WEST OF LINTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 15' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 23' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	392192.9 5124081.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1997 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 0 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 15, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	65 Ft.	Other Special	N
49 Structure Length	134.84 Ft.	218 Channel Profile	1 48 05/22/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	11/25/1997
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	DPI-0036(002)152
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-110-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,112	100	4,112	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	541	100	541	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	93	28	7	2	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Spill between N1 and N2 beams on diaphragm of pier. - 10/15/2019										
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	269	100	269	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Both rails paint is starting to fail. - 10/15/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Spalls on diaphragms N & N1 west side. - 10/15/2019**Alert Code 1:** Old pile in channel catching debris and restricting flow by 10%. - 10/15/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-110-32.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	11 WEST 2 NORTH STRASBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 23' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	392081.4 5114638.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2002 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 29, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	22.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.7 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, inspector1
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 8X6X40' SPPA		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-110-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	150	100	150	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: water in pipe is 2' deep no measurements taken. - 10/29/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-110-41.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	11 WEST 6 SOUTH STRASBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 02' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 24' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	390455.3 5099996.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1987 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	33.14 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	25.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X40 CMP		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 15-110-41.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/2:Steel Culvert	ft	79	0	0	49	39	51	40	0	0
1000/2:Corrosion	ft	39	0	0	100	39	0	0	0	0
Notes:Both pipe have corrosion more at flow line of water and also on outside of exposed pipe tops at the ends of pipes - 10/16/2019										
1900/2:Distortion	ft	40	0	0	0	0	100	40	0	0
Notes:Both have have distortion at the seams of the pipes - 10/16/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Some of the effectiveness is being lost at bottom of pipes at water flow line - 10/16/2019										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
6000/3:Scour	each	2	0	0	100	2	0	0	0	0
Notes:Scour on north and south ends of pipe and some spots encroaching the road both sides - 10/16/2019										
8402/2:Headwalls	each	2	0	0	50	1	0	0	50	1
1190/2:Abrasion(PSC/RC)	each	1	0	0	100	1	0	0	0	0
Notes:Headwalls on south end show wear and Abrasion and some rebar exposed - 10/16/2019										
4000/2:Settlement	each	1	0	0	0	0	0	0	100	1
Notes:Headwall has failed and 1 pole is chained to west pipe to hold back a panel that is keeping middle material between pipes in place - 10/16/2019										

Remarks: Both culverts have 4 - 2 IN holes in them with minor fill loss. Channel alignment poor from north. East pipe has debris blocking approx. 25%. West Pipe Seam is separated about 2" on top. Steel panels on north side between pipes are displaced. top panel is gone and second panel is bowed outward. erosion is encroaching roadway on north and south side of the road up to the gravel edge. 2 wood poles are trying to hold steel panels in place and 1 pole is chained to the NW pipe to hold post in place. Some crushing of west pipe and roof line. unable to measure do to water in pipe. - 10/16/2019

Alert Code 1: East pipe has debris blocking approximately 25% of pipe. Scour south side between culverts 2' x 2' x 3' Dimension. Scour on SW corner 4' x 6'x 10' dimension. - 10/16/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-112-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SAND CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST 4 SOUTH TEMVIK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 18' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 22' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	394455.2 5129624.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1999 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DPI-036(005)151
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X12X72' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-112-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	144	100	144	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/2:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: Approx. One foot of dirt in each barrel. Large trees restricting flow on east end, outflow on south barrel has build up ruffly 2' and is restricting flow. - 10/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-113-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SAND CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 10 SOUTH HAZELTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 20' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 20' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	396401.2 5132913.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 23 42 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1995 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	7 Miles	36 Traffic Safety Features	1 1 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	79 Ft.	Other Special	N
49 Structure Length	82.02 Ft.	218 Channel Profile	1 48 05/17/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/07/1996
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	BRO-15(7)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-113-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	2,497	100	2,497	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	315	100	315	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	164	100	164	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Metal railing showing oxide film - 10/9/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NW end treatment damaged. Deck has some minor cracks. Item 36D changed to 0 because of damage. SW and NE end markers have been removed and are laying on guardrail. 2 - 1' x 1' spalls on top of SE wing. NW, SW and NE guardrail is installed too low. - 10/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-114-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST OF LINTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 16' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 18' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	398704.0 5124622.9	Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type :stressed concrete continuous		61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 32
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	65 30 Year of ADT	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 15, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	50 Ft.	Other Special	N
49 Structure Length	105.97 Ft.	218 Channel Profile	1 48
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	05/22/2019
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	None
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	-1
	27.9 Ft.	213 Federal Aid Project Number	12/16/1996
52 Deck Width	30.8 Ft.	214 Delayed Inspection	BRO-15(4)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	McCloud, Jochim
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-114-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,250	100	3,250	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	423	100	423	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	95	100	95	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	213	100	213	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Paint is starting to peel off both bridge railings - 10/15/2019										
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: SW end marker missing. - 10/15/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-114-35.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01536 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 WEST OF STRASBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	10.298	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 08' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 19' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	397256.9 5109738.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1999 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	350 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	11.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	December 06, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	1 48 05/09/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	SC-1536(55)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
DOUBLE, 14X8X56' PRECAST RCB			

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-114-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/2:Re Conc Culvert Precast	ft	112	100	112	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
8402/2:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: 12/6/2018 - Large tree branch in East barrel, North end.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-114-36.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 WEST 1 SOUTH STRASBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 07' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 18' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	398322.0 5108198.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1997 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	December 06, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DPI-0036(002)151
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X8X68' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-114-36.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	135	94	127	6	8	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	8	0	0	100	8	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/2:Headwalls	each	2	0	0	100	2	0	0	0	0
1130/2:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0

Remarks: 4/3/17- Hairline cracks in headwalls. 12/6/2018 - 6" x 6" spall NE corner

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-118-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	MCCULLEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 12 SOUTH HAZELTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 18' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 13' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	405145.1 5129310.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 45 81 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 27 49 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	12 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	50 30 Year of ADT	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 09, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.7 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 05/22/2019
49 Structure Length	25.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	03/19/2018
51 Bridge Rdwy Width - Curb to Curb	26.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 15-118-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	570	100	570	0	0	0	0	0	0
110/2:Re Conc Opn Girder/Beam	ft	194	88	170	12	24	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	24	0	0	100	24	0	0	0	0
Notes:spalling bottom of girder E1 - 10/9/2019										
215/3:Re Conc Abutment	ft	43	0	0	100	43	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
Notes:North abutment 3 spalls under girders - 10/9/2019										
1190/3:Abrasion(PSC/RC)	ft	33	0	0	100	33	0	0	0	0
Notes:Both abutments showing abrasion/wear - 10/9/2019										
330/2:Metal Bridge Railing	ft	53	100	53	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
1130/2:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:All 4 wings have cracking - 10/9/2019										

Remarks: Top of SE wing pedestal broke off. Wings have minor cracks. NE & SE corners have cracks. North backwall has cracking and spalling at bearing points. North backwall has 3 spalled areas under bearings 2' x 2'. Two 3' channel beam added in 1999 for added width. partial fence at west opening of bridge Need to add defect 1190 abrasion/wear to element 110 reinforced concrete open girder/beam for 24ft - 10/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-118-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	IN LINTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 15' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 14' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	404269.0 5124325.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 47 85 Tons
208 Dk Overburden	21 Gravel/Dir	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	10 Tons
27 Yr Built	1940 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT	71 Waterway Adequacy	4 Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 15, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/22/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/19/2018
	27.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-118-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	225	100	225	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	43	0	0	100	43	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	43	0	0	100	43	0	0	0	0
Notes:Both have normal abrasion and wear. - 10/15/2019										
330/1:Metal Bridge Railing	ft	50	100	50	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	50	100	50	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-118-26.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF LINTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 16' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 15' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	403505.9 5124684.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 28 52 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	120 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	October 15, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	58 Ft.	Other Special	N
49 Structure Length	121.06 Ft.	218 Channel Profile	1 48 05/22/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/19/2018
52 Deck Width	32.5 Ft.	213 Federal Aid Project Number	SOS-15(1)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-118-26.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	12,906	100	12,906	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	486	99	483	1	3	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:1 spall on W1 girder and 2 spalls on E1 girder north ends - 10/15/2019										
1110/1:Cracking (PSC)	ft	1	0	0	100	1	0	0	0	0
Notes:Hairline crack on E1 girder on south end. - 10/15/2019										
210/3:Re Conc Pier Wall	ft	33	100	33	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	243	100	243	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NO GUARDRAIL ON SW & NE CORNERS. 2 Spalls on east beam north end caused by placement of new riprap. 1 spall same side on beam W1. SE wing has several spalls also caused by placement of new riprap. No rebar or cables exposed. E1 Girder has longitudinal crack 2' long on the south end. NE, NW, SE end markers missing. - 10/15/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-118-26.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK OVERFLOW	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF LINTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 16' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 14' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	404210.1 5124625.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 31 56 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 34 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1999 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	9 Relief for waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	120 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	3 SC - Unstable
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 15, 2019
32 Approach Roadway Width	28 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	26.9 Ft.	Other Special	N
48 Length of Max Span	31 Ft.	218 Channel Profile	1 48 05/22/2019
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/07/2017
51 Bridge Rdwy Width - Curb to Curb	26.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-118-26.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
115/1:Pre Conc Stringer	ft	279	100	279	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	62	95	59	5	3	0	0	0	0
1130/2:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
Notes:2 verticals in south abutment and 1 vertical in north abutment - 10/15/2019										
330/2:Metal Bridge Railing	ft	62	100	62	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
8398/2:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-119-04.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01506 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HAWK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 1 NORTH BRADDOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.500	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 34' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 13' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	405749.8 5158668.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2000 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	SC-1506(53)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14X6X84' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-119-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	167	100	167	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
1130/3:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:SW wing has cracking - 11/4/2019										
8402/2:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: Minor cracks on SW and center wings south end. Big beaver dam up stream 20' from box. - 11/4/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-119-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	24.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	MCCULLEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 11 SOUTH HAZELTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 18' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 13' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	405316.8 5129534.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 0 0 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 0 0 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1947 106 Yr Reconstructed -1	67 Structural Condition	0 Closed
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	3 Intolerable - Correct
29 ADT	5 30 Year of ADT 2018	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 04, 2018
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.7 Ft.	Other Special	N
48 Length of Max Span	21 Ft.	218 Channel Profile	Y 48 05/15/2015
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-119-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	409	0	0	0	0	100	409	0	0
107/1:Steel Opn Girder/Beam	ft	217	0	0	100	217	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	39	0	0	0	0	100	39	0	0
330/1:Metal Bridge Railing	ft	49	0	0	100	49	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	49	0	0	100	49	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	75	3	0	0	25	1

Remarks: 12/4/2018 - BRIDGE HAS BEEN REMOVED**Alert Code 1:** 12/4/2018 - BRIDGE HAS BEEN REMOVED

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-119-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH 1 EAST OF LINTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 14' 60.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 12' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	406606.5 5122532.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 27 49 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2005 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	5 Highway-pedestrian - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	57 Ft.	Other Special	N
49 Structure Length	113.85 Ft.	218 Channel Profile	1 48 05/12/2017
50 Curb/Sidewalk Widths	10.5 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	10/31/2005
52 Deck Width	41.3 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-119-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,674	100	4,674	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	540	100	540	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	82	100	82	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	85	100	85	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	228	89	202	11	26	0	0	0	0
1130/2:Cracking (RC and Other)	ft	26	0	0	100	26	0	0	0	0
Notes:Cracking in east barrier. - 10/7/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Some hairline vertical cracks in east concrete barrier. - 10/7/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-122-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH 3 EAST OF LINTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 15' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 10' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	410020.8 5123038.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 26 48 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 12 23 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1956 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	1 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 15, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	40 Ft.	218 Channel Profile	1 48 05/09/2019
49 Structure Length	44.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/29/2016
51 Bridge Rdwy Width - Curb to Curb	22.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 15-122-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,076	100	1,076	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	180	100	180	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:All beams coating is diminishing - 10/15/2019										
215/2:Re Conc Abutment	ft	49	59	29	41	20	0	0	0	0
1130/2:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
Notes:5 vertical cracks in east abutment. One large vertical crack in west abutment. - 10/15/2019										
311/2:Moveable Bearing	each	4	100	4	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:All bearings coating is diminishing - 10/15/2019										
313/2:Fixed Bearing	each	4	100	4	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:All bearings coating is diminishing - 10/15/2019										
330/2:Metal Bridge Railing	ft	89	100	89	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	50	50	50	50	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	50	0	0	100	50	0	0	0	0
Notes:Backside of both bridge railing coating is diminishing. - 10/15/2019										
331/2:Re Conc Bridge Railing	ft	89	100	89	0	0	0	0	0	0
8398/2:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: EFFLORESCENCE BEGINNING ON ABUTS & CRACKS. NO END MARKERS. POOR CHANNEL ALIGNMENT.
 East abutment has 5 hairline to 1/8" vertical cracks. West abutment has hairline to 1/8" vertical cracks and a
 3/16" to 1/4" vertical crack in the middle of this abutment. - 10/15/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-123-04.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01506 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LONG LAKE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 1 NORTH BRADDOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	7.898	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 34' 29.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 08' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	412157.2 5158548.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	40 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	24 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1959 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	85 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	0.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 04, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	25.6 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 05/17/2019
49 Structure Length	62.01 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	03/19/2018
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	CS-702(3)
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 15-123-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,572	100	1,572	0	0	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	308	100	308	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	26	92	24	8	2	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:North side of pier has 1'x1' spall due to ice damage. - 11/4/2019										
215/3:Re Conc Abutment	ft	49	0	0	100	49	0	0	0	0
1130/3:Cracking (RC and Other)	ft	49	0	0	100	49	0	0	0	0
Notes:Both abutments have one horizontal crack thru entire length of abutments that transfer to vertical cracks on wings. - 11/4/2019										
330/1:Metal Bridge Railing	ft	125	100	125	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/1:Ox Flm/Txt Adhr(Stl Prot Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Coating is starting to diminish and rust. - 11/4/2019										
331/1:Re Conc Bridge Railing	ft	125	100	125	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:All wings have vertical cracking. - 11/4/2019										

Remarks: Pier has a 1'x1' spall on north edge, from ice damage. 1 vertical HL crack on SE edge of east abut. 1 vertical HL crack on NW edge of west abutment. Poor sight distance from west due to vertical curve. - 11/4/2019

Alert Code 2: Inspection in 2000 turns up cracks on wings. Starting half way up progressing downward at 45 degrees to point below bearing seats then horizontally across entire face of both abuts. - 11/4/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-124-07.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01523 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1.5 SOUTH OF BRADDOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	4.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 32' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 06' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	415253.3 5155194.9	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	85 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	44.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	08/09/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CNOB-CNOC-1523(059)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
TRIPLE 14 X 11 X 60 PCBC		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-124-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	180	100	180	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: - Spalling on SE top of wing possible damage from rip-rap placement. Fence across the West end of structure.
Sediment starting to build up sum in north barrel 2"-4" for half the barrel - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-124-29.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 6 NORTH STRASBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 13' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 06' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	414523.1 5119190.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1993 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	80 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	1 1 0 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 29, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	71 Ft.	Other Special	N
49 Structure Length	134.84 Ft.	218 Channel Profile	1 48 05/08/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	12/16/1996
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	BRO-15(6)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-124-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	44,378	100	44,378	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	541	100	541	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	269	100	269	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Paint is starting to degrade and fail. - 10/29/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: THREE BRIDGERAIL ANCHOR BOLTS OUT OF 168 FOUND TO BE LOOSE. - 10/29/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-124-42.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Major Collector
04 City	HARDING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01542 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 7 SOUTH STRASBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	14.297	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 01' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 06' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	413965.1 5097906.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2001 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	December 06, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	SC-1542(054)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14X4X56' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-124-42.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	112	99	111	1	1	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/2:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: 4/4/17- 1 spall in middle wall east barrel. East barrel,north end, apron section is settling slightly. Brush starting to grow on south end of box full width across box.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-124-43.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	80.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 7 SOUTH STRASBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 01' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 06' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	414199.5 5097047.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 17 30 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 12 22 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	16 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 21, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.0 Ft.	Other Special	N
48 Length of Max Span	20 Ft.	218 Channel Profile	1 48 05/09/2019
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	03/19/2018
51 Bridge Rdwy Width - Curb to Curb	21.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, inspector1
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 15-124-43.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/2:Timber Deck	sq.ft	527	100	527	0	0	0	0	0	0
111/2:Timber Open Girder	ft	262	100	262	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	43	0	0	95	41	5	2	0	0
1130/2:Cracking (RC and Other)	ft	43	0	0	95	41	5	2	0	0
Notes:north abutment has vertical crack 1 to 2 inches in width south abutment has 1 inch crack at the SW corner. - 11/21/2019										
332/2:Timb Bridge Railing	ft	49	0	0	94	46	0	0	6	3
1180/2:Abrasion	ft	46	0	0	100	46	0	0	0	0
Notes:both east and west timber rails showing signs of abrasion and wear - 11/21/2019										
7000/2:Damage	ft	3	0	0	0	0	0	0	100	3
Notes:SE corner of bridge rail broke due to vehicle damage - 11/21/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0

Remarks: MINOR CRACKS ON BOTH ABUTMENTS. SW corner of new curb broke off due to motorgrader hitting it. NE and SW end markers missing. south load limit sign was taped over and cant really make out if load limit is 10 ton or 16 ton north sign shows 16 ton. unable to verify abutment conditions due to high water at this time - 11/21/2019

Alert Code 1: Erosion taking place on top at the NE corner 4"x4" hole filling being lost behind abutment, also a 2"x2" erosion hole with fill being lost behind abutment SE corner - 11/21/2019

Alert Code 2: North abutment has a vertical crack ranging from 1 to 2 inches in width. There is a 6 inch by 4 inch spall at approximately mid-crack. Crack appears to be through the entire thickness of the abutment. South abutment has a 1 inch wide crack at the SW corner. This crack appears to be through the entire thickness of the abutment. - 11/21/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-128-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 10 EAST LINTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 12' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 01' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	420949.1 5118547.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2003 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 29, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DPI-0036(009)151
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X9X28' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-128-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	56	100	56	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8399/3:Slope Protection, RC	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1080/3:Delamination/Spall/Patched Area	each	3	0	0	100	3	0	0	0	0
Notes:NE,NW,SW wings have spalling where they meet the barrels - 10/29/2019										
1130/3:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:SE wing has cracking on panles - 10/29/2019										

Remarks: No end markers/hazard markers. SE and SW wings have spalling on tops. SE wing also has cracking in a few of the panels, NE and NW wings have spalling where they meet the barrels - 10/29/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-129-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	83.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	12 EAST 1 NORTH HAZELTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 30' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 00' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	422225.4 5150287.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 40 73 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 20 37 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	15 Tons
Age and Service		Appraisal	
27 Yr Built	1952 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 04, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.7 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 05/17/2019
49 Structure Length	32.15 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/13/2004
51 Bridge Rdwy Width - Curb to Curb	19.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	21.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 15-129-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	689	50	344	50	345	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	345	0	0	100	345	0	0	0	0
Notes:Top of deck has spalls and delamination. - 11/4/2019										
110/1:Re Conc Opn Girder/Beam	ft	161	0	0	100	161	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	159	0	0	100	159	0	0	0	0
Notes:All beams have delamination. - 11/4/2019										
1090/1:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
Notes:N1 has 2 feet of exposed rebar, no section loss. - 11/4/2019										
215/3:Re Conc Abutment	ft	43	0	0	81	35	19	8	0	0
1080/3:Delamination/Spall/Patched Area	ft	8	0	0	0	0	100	8	0	0
Notes:East abutment has a spall under beam seat N1 and S1. - 11/4/2019										
1190/3:Abrasion(PSC/RC)	ft	35	0	0	100	35	0	0	0	0
Notes:All remaining abutment has abrasion. - 11/4/2019										
331/1:Re Conc Bridge Railing	ft	66	0	0	100	66	0	0	0	0
1190/1:Abrasion(PSC/RC)	ft	66	0	0	100	66	0	0	0	0
Notes:All bridge rail has abrasion and wear. - 11/4/2019										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1190/3:Abrasion(PSC/RC)	each	4	0	0	100	4	0	0	0	0
Notes:All wings have abrasion. - 11/4/2019										

Remarks: All concrete scaling. Spalling in backwalls at waterline. Spalls at bearing points under beams steel exposed on abuts SW & NW wings have large popouts on them. Top of deck is spalled and scaled. Bottom side of deck looks good. - 11/4/2019

Alert Code 1: 15 ton load limit sign on east side is missing. - 11/4/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-129-46.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH OF HAGUE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 58' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 00' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	422178.2 5092250.7	Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 55 99 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 24 45 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1957 106 Yr Reconstructed	2001	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	November 05, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.7 Ft.	Underwater	N
48 Length of Max Span	20 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/09/2019
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	26.6 Ft.	212 Structure Load Rated	12/17/2001
52 Deck Width	28.5 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Kerzman
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 15-129-46.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	713	95	677	5	36	0	0	0	0
1190/2:Abrasion(PSC/RC)	sq.ft	36	0	0	100	36	0	0	0	0
Notes:deck showing abrasion and wear - 11/5/2019										
109/2:Pre Opn Conc Girder/Beam	ft	49	82	40	18	9	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	9	0	0	100	9	0	0	0	0
Notes:west beam 1 has spall - 11/5/2019										
110/2:Re Conc Opn Girder/Beam	ft	125	0	0	80	100	20	25	0	0
1080/2:Delamination/Spall/Patched Area	ft	100	0	0	100	100	0	0	0	0
Notes:all beam have some spalling - 11/5/2019										
1090/2:Exposed Rebar	ft	25	0	0	0	0	100	25	0	0
Notes:W1 W2 W3 have exposed rebar with no section loss - 11/5/2019										
215/3:Re Conc Abutment	ft	43	0	0	100	43	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
Notes:south abutment has spalling - 11/5/2019										
1190/3:Abrasion(PSC/RC)	ft	33	0	0	100	33	0	0	0	0
Notes:both abutment showing signs of abrasion and wear - 11/5/2019										
330/2:Metal Bridge Railing	ft	52	100	52	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
1080/2:Delamination/Spall/Patched Area	each	3	0	0	100	3	0	0	0	0
Notes:NW SW SE wings have some spalling - 11/5/2019										
1130/2:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:NE wing has cracking - 11/5/2019										

Remarks: POOR CHANNEL ALIGNMENT. The joint on the west side between the cast in place deck and the channel beam for the widening is open 1". Scaling, 6' x 6' top of SE wing. 2" x 1' x 1' spall on top of NW wing. Channel beam W has 2 spalls on it with rebar exposed, no section loss. Erosion behind SE wing 2' deep x 3' long. Fence across east side of bridge, Reinforced Concrete beam W1,W2, W3 have spalling. South abutment has several spalls 1 inch deep or less with no rebar exposed totalling 10 square feet. - 11/5/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-130-29.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01529 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	12 EAST 1 SOUTH OF LINTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	15.796	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 13' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 58' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	424217.3 5119858.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 36 65 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 21 39 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	52 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	3 SC - Unstable
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	47 Ft.	Other Special	N
49 Structure Length	100.07 Ft.	218 Channel Profile	1 48 05/08/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/19/2018
	28.2 Ft.	213 Federal Aid Project Number	CRS-1529(51)
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-130-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	3,057	100	3,057	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	400	100	400	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	200	100	200	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NO END MARKERS. SOME MINOR MAP CRACKING ON PIER CONCRETE NO GUARDRAIL ON NE OR SW CORNERS OF STRUCTURE. NW and SE guardrail is installed too low to the ground. - 10/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-131-31.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	59.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 EAST 4 NORTH STRASBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 11' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 57' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	425755.7 5115482.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	3 Serious
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 19 35 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 12 22 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	15 Tons
Age and Service		Appraisal	
27 Yr Built	1914 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 30, 2019
32 Approach Roadway Width	15 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 10/30/2019
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	12.5 Ft.	Other Special	N
48 Length of Max Span	74 Ft.	218 Channel Profile	1 48 05/14/2015
49 Structure Length	77.10 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-131-31.1

Structure Number: 15-131-31.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,389	0	0	82	1,139	17	236	1	14
1080/1:Delamination/Spall/Patched Area	sq.ft	1,389	0	0	82	1,139	17	236	1	14
Notes:Deck on east side has about 12 feet missing for 1 foot. One hole in east side along curb. One hole on west side along curb. Rest of deck is spalling and deteriorating. - 10/30/2019										
113/1:Steel Stringer	ft	692	0	0	0	0	100	692	0	0
1000/1:Corrosion	ft	692	0	0	0	0	100	692	0	0
Notes:All stringers have corrosion and some pack rust. - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No coating. - 10/30/2019										
120/1:Steel Truss	ft	154	0	0	0	0	100	154	0	0
1020/1:Connection	ft	144	0	0	0	0	100	144	0	0
Notes:Some members are bent. And have rusting. - 10/30/2019										
7357/1:Pack Rust	ft	10	0	0	0	0	100	10	0	0
Notes:Pack rust on members and connections. - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No coating. - 10/30/2019										
152/1:Steel Floor Beam	ft	85	0	0	100	85	0	0	0	0
1000/1:Corrosion	ft	85	0	0	100	85	0	0	0	0
Notes:All floor beams have corrosion - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No coating - 10/30/2019										
215/3:Re Conc Abutment	ft	36	0	0	0	0	100	36	0	0
1190/3:Abrasion(PSC/RC)	ft	36	0	0	0	0	100	36	0	0
Notes:Course aggregate on both abutments is popping out and delaminating due to abrasion and wear. - 10/30/2019										
330/2:Metal Bridge Railing	ft	154	0	0	0	0	100	154	0	0
1000/2:Corrosion	ft	154	0	0	0	0	100	154	0	0
Notes:All railing has rust. - 10/30/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No coating - 10/30/2019										
331/2:Re Conc Bridge Railing	ft	154	0	0	87	134	0	0	13	20
1080/2:Delamination/Spall/Patched Area	ft	20	0	0	0	0	0	0	100	20
Notes:17 feet of east side spalled completely off. 3 feet on west north end is gone. - 10/30/2019										
1190/2:Abrasion(PSC/RC)	ft	134	0	0	100	134	0	0	0	0
Notes:Concrete all has abrasion and wear. - 10/30/2019										
8401/3:Wings	each	4	0	0	0	0	100	4	0	0

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SEC 409

Structure Number: 15-131-31.1

1080/3:Delamination/Spall/Patched Area	each	2	0	0	0	0	100	2	0	0
Notes:NE and NW wings have major spalling and tops broke off. - 10/30/2019										
1130/3:Cracking (RC and Other)	each	2	0	0	0	0	100	2	0	0
Notes:SW and SE wings have cracking. - 10/30/2019										

Remarks: ALL CONCRETE IN DECK, ABUTMENTS & WINGS DETERIORATING. TOP OF NW WING CRACKED AND END OF WING IS CHIPPED. CRACK IN SOUTH BACKWALL, STEEL EXPOSED. MINOR CHIPPING ON CURBS. ALL STEEL WITH MINOR RUST. PIN AT L-O ON EAST SIDE HAS SECTION LOSS ON NUT. DIAGONAL BRACE FROM U-2 TO L-3 ON WEST TRUSS SECTION HAS BEEN WELDED, BUT LOOKS TO BE WELDED TO THE UPPER CHORD CAUSING THE DIAGONAL TO BEND OUT OF PLANE AS IF IT WERE IN COMPRESSION. MEASURED 1" OF BOW. VERTICAL SWAY BRACES WEST SIDE ALL HAVE MAJOR DAMAGE FROM ICE. Sway braces L1, L2 & L3 all have had new bolts installed where they connect to the lower chord. Inspection found that deck concrete condition is worsening and deteriorating. - 10/30/2019

Alert Code 1: 18'x1' section of deck east side curb and 3'x1' section of deck west curb deteriorated and fell off - 10/30/2019

Alert Code 3: The east side of the deck has deteriorated to the point that the concrete is 1" thick and now has holes starting to appear. There is also a hole approximately 6" - 1' wide in the deck where the curb has fallen off on the east side. - 10/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-131-32.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01529 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 9 EAST STRASBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	11.298	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 58' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	425282.2 5113811.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 46 83 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	52 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	83.01 Ft.	218 Channel Profile	1 48 05/08/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/19/2018
52 Deck Width	32.5 Ft.	213 Federal Aid Project Number	CRS-1529(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 15-131-32.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	2,702	100	2,691	0	11	0	0	0	0
1130/2:Cracking (RC and Other)	sq.ft	11	0	0	100	11	0	0	0	0
Notes:Cracking on top of deck also on bottom side of deck with some efflorescence - 10/30/2019										
104/2:Pre Clsd Box Girder	ft	331	100	331	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	33	100	33	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	217	100	217	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	167	100	167	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NO END MARKERS BUT THERE IS REFLECTORS ON THE GUARDRAIL FOR BOTH DIRECTIONS. WEST SPAN UNDERDECK HAS HAIRLINE CRACKING WITH EFFLORESCENCE. Approach guardrail on NE & SW corners only. SW End treatment damaged. First post on SW guardrail is broken. 4 small hairline cracks in west abutment - 10/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-131-33.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	88.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01529 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 EAST 3 NORTH STRASBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	10.597	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 57' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	425754.9 5113107.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 25 45 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 15 27 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	52 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	0.00	36 Traffic Safety Features	1 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	3 SC - Unstable
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 30, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	29.5 Ft.	Other Special	N
48 Length of Max Span	52 Ft.	218 Channel Profile	1 48 05/08/2019
49 Structure Length	55.12 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	03/19/2018
51 Bridge Rdwy Width - Curb to Curb	28.5 Ft.	213 Federal Aid Project Number	CS-465(6)
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-131-33.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	551	100	551	0	0	0	0	0	0
202/3:Steel Column	each	12	75	9	25	3	0	0	0	0
7000/3:Damage	each	3	0	0	100	3	0	0	0	0
Notes:Columns on south abutment have damage do to ice - 10/30/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/3:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Paint starting to oxidize - 10/30/2019										
219/3:Stl Abutment	ft	62	100	62	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/3:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Oxidizing taking place on both abutments - 10/30/2019										
231/2:Steel Pier Cap	ft	62	100	62	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Pier cap has some oxidization taking place - 10/30/2019										
330/1:Metal Bridge Railing	ft	112	100	112	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	112	100	112	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	50	2	50	2	0	0	0	0
1900/2:Distortion	each	2	0	0	100	2	0	0	0	0
Notes:SE and SW wings have distortion bowed outward - 10/30/2019										

Remarks: Ice damage to 3 of 6 pile South abutment. 2 of the 3 piling on the NE and SE wings have ice damage. - 10/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-132-07.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01529 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF KINTYRE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	37.892	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 32' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 57' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	426958.4 5154836.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1960 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	150 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.9 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 8X8X30' RCB EXTENDED WITH 3 8X24'		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 15-132-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	161	0	0	100	161	0	0	0	0
8401/3:Wings	each	2	100	2	0	0	0	0	0	0

Remarks: 2' OF SILT IN ENTIRE LENGTH OF STRUCTURE. Full of water unable to inspect - 10/9/2019

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SEC 409

Structure Number: 15-133-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	15 EAST 1 SOUTH LINTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 14' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 55' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	429057.7 5121685.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 27 49 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2000 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	78 Ft.	Other Special	N
49 Structure Length	82.02 Ft.	218 Channel Profile	1 48 05/08/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.5 Ft.	212 Structure Load Rated	10/26/2000
52 Deck Width	30.8 Ft.	213 Federal Aid Project Number	BRO-15(9)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-133-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,530	100	2,530	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	315	100	315	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	164	100	164	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NW & NE guardrail end treatments are broken. - 10/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-133-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	10 EAST OF STRASBURG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 07' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 56' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	427569.9 5108945.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1978 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	December 05, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	35.10 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	SOS-15(2)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10X11X36' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-133-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	108	0	0	100	108	0	0	0	0
1130/3:Cracking (RC and Other)	ft	108	0	0	100	108	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/2:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: 3/30/17- SPALL ON THE UNDERSIDE OF NORTH PARAPET HAS STEEL EXPOSED. MINOR SHRINKAGE CRACKING IN WALLS & PARAPET. SEDIMENT ON NORTH END WEST BARREL ONLY. NO OBJECT MARKERS. 12/5/2018 - Barbed wire fence has been replaced with 1 inch steel tube fence panels.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-135-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Emmons	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	16 EAST 1 NORTH LINTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 16' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 53' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	431038.4 5124988.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	N Tons
27 Yr Built	2012 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	65.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/08/2012
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0015(015)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 12' X 10' X 58' PRCB		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 15-135-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	116	100	116	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 16-102-13.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Foster	26 Functional	Rural, Local
04 City	LONGVIEW TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PIPESTEM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 W 3 S CARRINGTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 23' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 13' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	482954.1 5249566.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2001 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	40.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	13 Ft.	Other Special	N
49 Structure Length	26.90 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-16(6)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X9X126' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 16-102-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	253	100	253	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Erosion behind both wings on the north side. 10/30/2015 - Still eroded behind both wings on North side. - 9/4/2019

Alert Code 1: 10/9/2017 - Major erosion behind NE Wing. 9/4/2019- Major erosion behind NE wing. Also erosion behind southeast wing. - 9/4/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 16-104-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Foster	26 Functional	Rural, Local
04 City	LONGVIEW TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PIPESTEM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 6 SOUTH CARRINGTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 21' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 10' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	486355.6 5245491.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 44 79 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 26 48 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	September 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	36 Ft.	Other Special	N
49 Structure Length	38.06 Ft.	218 Channel Profile	1 48 04/11/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	30.2 Ft.	212 Structure Load Rated	03/19/2018
52 Deck Width	31.8 Ft.	213 Federal Aid Project Number	BRO-16(8)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 16-104-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	305	100	305	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	75	100	75	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	75	100	75	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Hairline crack on southwest wing . 3 ft from end of wing wall. - 9/4/2019										

Remarks: NBI Remarks: Structure is located between two horizontal curves. - 9/4/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 16-105-16.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Foster	26 Functional	Rural, Major Collector
04 City	LONGVIEW TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01618 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PIPESTEM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 6 SOUTH CARRINGTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.799	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 21' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 09' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	487729.4 5244731.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 34 62 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1966 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	65 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	September 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 04/29/2019
50 Curb/Sidewalk Widths	1.6 Ft Rt-Side	Chaining Date	None
	1.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	08/09/2017
52 Deck Width	31.5 Ft.	213 Federal Aid Project Number	CS-657(4)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 16-105-16.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	791	100	791	0	0	0	0	0	0
206/3:Timber Column	each	26	100	26	0	0	0	0	0	0
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
331/2:Re Conc Bridge Railing	ft	49	98	48	2	1	0	0	0	0
1090/2:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:Exposed on the back side of the SW corner of the Railing. - 9/4/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Scour hole south of structure. - 9/4/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 16-106-18.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Foster	26 Functional	Rural, Major Collector
04 City	LONGVIEW TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01605 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PIPESTEM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 SOUTH OF CARRINGTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.400	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 19' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 08' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	489378.6 5242161.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 30 55 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 26 Tons
208 Dk Overburden	31 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1970 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	330 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	September 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	42 Ft.	Other Special	N
49 Structure Length	44.95 Ft.	218 Channel Profile	1 48 04/11/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	CS-901(3)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 16-106-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	1,345	100	1,345	0	0	0	0	0	0
510/2:Wearing Surfaces	sq.ft	1,345	100	1,345	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	449	100	449	0	0	0	0	0	0
202/3:Steel Column	each	18	78	14	22	4	0	0	0	0
Notes:Ice Damage to pile on West Side. - 9/4/2019										
7000/3:Damage	each	4	0	0	100	4	0	0	0	0
Notes:Ice Damage to pile on the NW & SW corners of Abutment and Wings. - 9/4/2019										
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
217/3:Masonry Abutment	ft	59	100	59	0	0	0	0	0	0
Notes:Element Should be listed at 218 - Other due to being Steel. - 9/4/2019										
231/2:Steel Pier Cap	ft	59	100	59	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	89	100	89	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	89	100	89	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor ice damage to wing piling sw & nw corner. New w-beam approach railing and box beam bridge rail since last inspection in 2005. Vehicle damage to the sw guardrail. South channel banks are being eroded 9/4/2019- end terminal damaged on northeast corner of guardrail. - 9/4/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 16-115-01.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Foster	26 Functional	Rural, Major Collector
04 City	NORDMORE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01602 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	8 NORTH 8 EAST CARRINGTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	14.797	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 34' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 57' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	503548.2 5268839.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 40 72 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 18 33 Tons
208 Dk Overburden	31 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1977 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	145 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	September 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.5 Ft.	Underwater	N
48 Length of Max Span	57 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 04/12/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/19/2018
	27.9 Ft.	213 Federal Aid Project Number	ROS-1602(51)
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 16-115-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,808	100	1,808	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	239	100	239	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	121	100	121	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	121	98	119	2	2	0	0	0	0
7000/2:Damage	ft	2	0	0	100	2	0	0	0	0
Notes:Southwest corner of concrete guard rail. - 9/4/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Poor channel alignment on the south side of the road. - 9/4/2019**Alert Code 1:** 200' west of structure is eroded. erosion behind ne & se wingwalls. Large deposit of drift south of bridge in channel. - 9/4/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 16-119-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Foster	26 Functional	Rural, Local
04 City	LARRABEE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	12 E 7 N CARRINGTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 33' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 51' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	510307.0 5267210.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 31 56 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1987 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	September 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	85 Ft.	Other Special	N
49 Structure Length	89.90 Ft.	218 Channel Profile	1 48 04/12/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/04/2002
	28.2 Ft.	213 Federal Aid Project Number	BRO-16(9)
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 16-119-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,756	100	2,756	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	361	100	361	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	180	39	70	61	110	0	0	0	0
Notes:Freckled Rust. - 9/4/2019										
1000/2:Corrosion	ft	180	39	70	61	110	0	0	0	0
Notes:The whole North rail is covered in Freckled rust and 20' of South Rail. - 9/4/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Alert Code 1: . - 9/4/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 16-121-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	48.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Foster	26 Functional	Rural, Local
04 City	LARRABEE TOWNSHIP	37 Historical Significance	1 Br on Natl Reg Hist PI
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 1 SOUTH GRACE CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 32' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 49' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	512649.6 5265625.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	3 Serious
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 20 37 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 12 23 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	0 Tons
Age and Service		Appraisal	
27 Yr Built	1925 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	2 Intolerable - Replace
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	5 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	14 Ft. 9 In.	90 Date of Last Inspection	September 04, 2019
32 Approach Roadway Width	15 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 09/04/2019
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.7 Ft.	Other Special	N
48 Length of Max Span	99 Ft.	218 Channel Profile	1 48 04/12/2017
49 Structure Length	102.03 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	11 Ft. 8 In.	216 Inspector	Horn, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 16-121-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,830	0	0	60	1,100	40	730	0	0
1085/1:Delamination	sq.ft	1,830	0	0	60	1,100	40	730	0	0
Notes:Delamination and section loss to the Deck. - 9/4/2019										
113/2:Steel Stringer	ft	614	0	0	100	614	0	0	0	0
1000/2:Corrosion	ft	614	0	0	100	614	0	0	0	0
Notes:Freckled rust present throughout all the areas. - 9/4/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Protection has failed. - 9/4/2019										
120/2:Steel Truss	ft	203	0	0	100	203	0	0	0	0
1000/2:Corrosion	ft	203	0	0	100	203	0	0	0	0
Notes:Freckled rust present throughout all the areas. - 9/4/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Protection has failed. - 9/4/2019										
152/2:Steel Floor Beam	ft	95	0	0	100	95	0	0	0	0
1000/2:Corrosion	ft	95	0	0	100	95	0	0	0	0
Notes:Freckled rust present throughout all the areas. - 9/4/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Protection has failed. - 9/4/2019										
215/3:Re Conc Abutment	ft	36	0	0	0	0	100	36	0	0
1080/3:Delamination/Spall/Patched Area	ft	36	0	0	0	0	100	36	0	0
Notes:Delamination present on both abutments. - 9/4/2019										
330/2:Metal Bridge Railing	ft	203	0	0	100	203	0	0	0	0
1000/2:Corrosion	ft	203	0	0	100	203	0	0	0	0
Notes:Freckled rust present throughout all railing. - 9/4/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Protection has failed. - 9/4/2019										
331/2:Re Conc Bridge Railing	ft	203	0	0	100	203	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	203	0	0	100	203	0	0	0	0
Notes:Delamination present on all concrete railing. - 9/4/2019										
8401/3:Wings	each	4	0	0	0	0	100	4	0	0
1080/3:Delamination/Spall/Patched Area	each	4	0	0	0	0	100	4	0	0
Notes:Delamination and spalls present in all wings. - 9/4/2019										

Remarks: NBI Remarks: Spalling on bottom of deck with exposed rebar. Posted for 11'08" vertical clearance. Oct.15,2007 no cracks visible on fracture critical members. 10/9/2017 - Not posted for tonnage on the East side (posting not required gld). 9-4-2019 - Still Not Posted on East End. - 9/4/2019

Alert Code 1: Erosion behind wingwalls. steel members are rusty. tilt on both abutments is 2 & 1/2 inches in four feet away from the channel. 10/17/2013 - Tilt is 3" in 4' away from channel now on both sides. 10/30/2015 - No change in tilt. 9/4/2019 - No change in Tilt on East Abutment with 3" in 4' and West abutment has 1" in 4'. - 9/4/2019

Alert Code 2: 9/4/2019 - Brace from u3-l2 north side missing. Cracking and spalling of concrete on wingwalls and abutments with exposure of rebar. - 9/4/2019

Fracture Critical: All members are covered in freckled rust. Used a ladder to inspect. - 9/4/2019

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SEC 409

Structure Number: 16-121-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Foster	26 Functional	Rural, Local
04 City	LARRABEE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	14 E 5 N CARRINGTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 31' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 49' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	513551.6 5264095.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	2 Concrete Precast Panel	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 21 38 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	September 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	59 Ft.	Other Special	N
49 Structure Length	62.01 Ft.	218 Channel Profile	1 48 04/12/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/06/1996
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	SOS-OS-16(5)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Structure Number: 16-121-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,894	100	1,894	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	249	100	249	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	87	54	13	8	0	0	0	0
Notes:Both Abutments are starting to have hairline cracking going on. - 9/4/2019										
1120/3:Efflorescence/Rust Staining	ft	8	0	0	100	8	0	0	0	0
Notes:Present on the North Abutment on both the East and West sides going under from the Wings. - 9/4/2019										
331/2:Re Conc Bridge Railing	ft	125	99	124	1	1	0	0	0	0
Notes:Exposed Rebar SE Corner. - 9/4/2019										
1090/2:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:Broken on the top of the SE Corner with Exposed Rebar. - 9/4/2019										
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
1130/3:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
Notes:Both the North Wings have pattern cracking going on throughout wing. - 9/4/2019										

Remarks: 10/17/2013 - Poured concrete behind all 4 wings to protect the inslope and also down and around the front of abutments on the West side of bridge. - 9/4/2019

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Structure Number: 16-122-05.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	72.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Foster	26 Functional	Rural, Major Collector
04 City	LARRABEE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01621 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	15 EAST 5 N CARRINGTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	18.896	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 31' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 47' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	515164.7 5263875.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 20 37 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 12 23 Tons
208 Dk Overburden	38 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1967 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	220 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	September 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	42 Ft.	Other Special	N
49 Structure Length	44.95 Ft.	218 Channel Profile	1 48 04/12/2017
50 Curb/Sidewalk Widths	1.6 Ft Rt-Side	Chaining Date	None
	1.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	28.5 Ft.	212 Structure Load Rated	03/19/2018
52 Deck Width	31.8 Ft.	213 Federal Aid Project Number	CS-108(5)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 16-122-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,281	100	1,281	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	1,281	100	1,281	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	449	100	449	0	0	0	0	0	0
202/3:Steel Column	each	18	28	5	56	10	17	3	0	0
Notes:Corrosion and damage to the west pile of both abutments do to ice damage. - 9/3/2019										
7000/3:Damage	each	14	7	1	71	10	21	3	0	0
Notes:Ice damage to all pile with twisting on piles on the NW and SW corners of the Abutments. - 9/3/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
217/3:Masonry Abutment	ft	66	100	66	0	0	0	0	0	0
Notes:Should be labeled as Element 218 - Other (Due to being Steel) - 9/3/2019										
231/2:Steel Pier Cap	ft	66	100	66	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	89	100	89	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	89	100	89	0	0	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
Notes:Ice damage to West side Wings. - 9/3/2019										
7000/3:Damage	each	2	0	0	100	2	0	0	0	0
Notes:Wings on West side have Ice damage. - 9/3/2019										

Remarks: NBI Remarks: No load limits posted, no approach guardrail. Inadequate riprap. Bridge end markers in place. Channel bank erosion along south side east of bridge. Bed deposits in channel east & downstream from bridge. - 9/3/2019

Alert Code 1: West piling of the south wingwall ice damage. NW Wing has major ice damage. - 9/3/2019

Alert Code 2: All the piling on the north abutment have damage and on the south abutment three of the piling have damage. 10/17/2013 - The West pile on the North and South Abutments have major damage and twisting (See Photos). - 9/3/2019

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SEC 409

Structure Number: 16-122-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Foster	26 Functional	Rural, Local
04 City	HAVEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	15 E 2 N OF CARRINGTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 28' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 47' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	515199.1 5257794.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 35 63 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2004 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 0 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	77 Ft.	Other Special	N
49 Structure Length	160.10 Ft.	218 Channel Profile	1 48 04/12/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	12/27/2004
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	BRO-0016(012)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Structure Number: 16-122-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	4,880	100	4,880	0	0	0	0	0	0
104/3:Pre Clsd Box Girder	ft	623	100	623	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	34	100	34	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	76	100	76	0	0	0	0	0	0
330/3:Metal Bridge Railing	ft	320	100	320	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10/17/2013 - Erosion behind guardrail and SE abutment wing. 9/03/2019- guard rail southeast has damage to 20 ft section . Southwest guardrail off retaining posts needs to be reset. - 9/3/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 16-123-13.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Foster	26 Functional	Rural, Local
04 City	BUCAPHALIA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	15 E 4 S OF CARRINGTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 23' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 47' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	515284.1 5249549.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	3 Intolerable - Correct
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	0 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	September 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	57 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 04/12/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/08/1996
52 Deck Width	30.2 Ft.	213 Federal Aid Project Number	BRO-16(7)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 16-123-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,798	100	1,798	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	239	100	239	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	59	85	50	15	9	0	0	0	0
Notes:Cracking present on all corners of abutments. - 9/3/2019										
1130/3:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes:Cracking present on all corners of abutments. - 9/3/2019										
330/2:Metal Bridge Railing	ft	121	100	121	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	121	100	121	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
Notes:Cracking on all four wing with spalls present on northeast and southeast wings. - 9/3/2019										
1080/3:Delamination/Spall/Patched Area	each	2	0	0	100	2	0	0	0	0
Notes:Spall on northeast and southeast wings. - 9/3/2019										
1130/3:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0

Remarks: Longitudinal cracking on all 4 wings. Scour behind NE & SE guardrail. 9/3/2019 - Still some erosion behind NE & SE wings coming off the Bridge end. - 9/3/2019

Alert Code 1: 10/29/2015 - Popout on the Diaphragm in the corners of the NE and NW abutments by the wings. - 9/3/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 16-124-05.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Foster	26 Functional	Rural, Local
04 City	LARRABEE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 2 SOUTH GRACE CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 31' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 45' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	517703.3 5262988.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	6	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2008 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	47.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	77.10 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0016(014)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
3 DOUBLES, 12 X 9 X 48 PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 16-124-05.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	288	100	288	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 16-116-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Applicable	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Foster	26 Functional	Rural, Local
04 City	NORDMORE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	8 S 10 E OF NEW ROCKFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 33' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 55' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	505585.8 5267781.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	G New-Not Yet Open
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	2 Concrete Precast Panel	64 Oper. Rating	HS 20 36 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 20 36 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	2019 106 Yr Reconstructed	67 Structural Condition	Unknown (NBI)
42 Type of Service	1 Highway - On	68 Deck Geometry	Unknown (NBI)
	5 Waterway - Under	69 Underclear. Vert & Horiz	Unknown (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	20 30 Year of ADT 2017	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic		36 Traffic Safety Features	1 1 1 1
19 Bypass, Detour Length	4 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 24, 2019
32 Approach Roadway Width	23 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.0 Ft.	Other Special	N
48 Length of Max Span	71 Ft.	218 Channel Profile	
49 Structure Length	74.00 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	1.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	28.0 Ft.	213 Federal Aid Project Number	BRO-0016(017)
52 Deck Width	30.0 Ft.	214 Delayed Inspection	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 16-116-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	2,220	100	2,220	0	0	0	0	0	0
520/3:Conc Re Prot Sys	sq.ft	2,220	100	2,220	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	284	100	284	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	110	100	110	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	148	100	148	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: _

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-102-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Local
04 City	SADDLE BUTTE TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 NORTH OF BEACH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 01' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	104d 00' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	119699.4 5219913.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 31 56 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1993 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 31, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	74 Ft.	Other Special	N
49 Structure Length	78.08 Ft.	218 Channel Profile	1 48 07/11/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.5 Ft.	212 Structure Load Rated	03/08/1996
52 Deck Width	30.8 Ft.	213 Federal Aid Project Number	BRO-17(6)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Martin, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-102-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,228	100	2,228	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	312	100	312	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	157	100	157	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 8/1/17 - No diving from bridge sign is layed over on NE side of bridge. 5-31-19 no changes , no diving from bridge sign laying in end section N E - 5/31/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-103-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Local
04 City	BEACH TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 1 EAST OF BEACH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 59' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	119473.8 5209941.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1967 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	40 Ft.	90 Date of Last Inspection	July 31, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	41.99 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	I-1-094()002
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Strand
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD, 10X10X43' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-103-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	171	99	169	1	2	0	0	0	0
1090/2:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
1130/2:Cracking (RC and Other)	ft	1	0	0	100	1	0	0	0	0
8398/2:Slope Protection	each	4	50	2	50	2	0	0	0	0
4000/2:Settlement	each	2	0	0	100	2	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: WEST SIDE OF RCB HAIRLINE CRACKING, ALSO TOP OF ROOF FROM PARAPET GOING SOUTH. CONCRETE CRACKED ON BOTTOM OF INNER WALL, NORTH SIDE STEEL EXPOSED. ALL 4 CORNERS CRACKED WHERE WING & PARAPET TIE. WINGS HAVE MINOR CRACKING.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-104-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Local
04 City	HENRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	17 NORTH 1 EAST OF BEACH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 10' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 57' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	123726.4 5236637.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 39 71 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 28 51 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	1	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	May 31, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	96 Ft.	Other Special	N
49 Structure Length	96.00 Ft.	218 Channel Profile	1 48 01/01/2000
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	09/25/2018
	28.0 Ft.	213 Federal Aid Project Number	BRO-0017(019)
52 Deck Width	30.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-104-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
15/1:Pre Concrete Top Flange	sq.ft	2,880	100	2,880	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	480	100	480	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	62	84	52	16	10	0	0	0	0
Notes:efflorence stain on both abutments - 5/31/2019										
1120/1:Efflorescence/Rust Staining	ft	10	0	0	100	10	0	0	0	0
Notes:eff staining both abut - 5/31/2019										
313/1:Fixed Bearing	each	10	100	10	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	192	100	192	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 9/2018 - Bridge replaced with a new concrete T-girder bridge. 10/31/2018 - New no issues. 5-31-19 efflorence stain both abutments - 5/31/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-105-41.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	80.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Major Collector
04 City	LONE TREE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01746 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST OF GOLVA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	9.398	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 57' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	121519.1 5187210.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	5 Moderate Damage
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1940 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	85 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	May 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10X10X28' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 17-105-41.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	85	0	0	100	85	0	0	0	0
1190/2:Abrasion(PSC/RC)	ft	85	0	0	100	85	0	0	0	0
Notes:Abrasion/spalling along flowline on bottom of structure. - 5/20/2019										
8401/2:Wings	each	4	0	0	50	2	0	0	50	2
Notes:wings are pushing in towards stream anchors have been placed on wings some erosion behind wings. - 5/20/2019										
4000/2:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:erosion starting to undermine roadway behind n e and n w wings separated 6", s e wing separated 3" - 5/20/2019										
6000/2:Scour	each	2	0	0	0	0	0	0	100	2
Notes:Scour and erosion causing roadway undermining and problems at wingwalls, - 5/20/2019										

Remarks: SEE PICTURES FOR VIEW OF NE WING SEPARATED 15". WING ARE PUSHING IN TOWARDS STREAM. ANCHORS HAVE BEEN PLACED ON THE WINGS. SOME EROSION BEHIND WINGS. EMBANKMENT EROSION IN BOTH DITCHES WEST SIDE OF BOX. EROSION STARTING TO UNDERMINE ROADWAY BEHIND N.E. WING. N.W. WING SEPARATED 6" S.E. WING 3" ALL ARE PUSHING IN TOWARDS STREAM. MINOR CRACKING ON INNERWALLS. NW CORNER HAS MINOR RDWY EROSION. MINOR CRACKING ON PARAPETS. NE INNER WALL HAS SPALLING/Abrasion ON BOTTOM AT FLOW LINE. 7/31/17 - NE corner has significant scour & undermining between wingwall & culvert. 5-20-19 new pict taken - 5/20/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-109-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	18.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Local
04 City	PEARL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	20 NORTH 6 EAST OF BEACH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 12' 17.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 51' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	131597.2 5239399.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	3 Serious
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 16 29 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 11 21 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	08 Tons
Age and Service		Appraisal	
27 Yr Built	1910 106 Yr Reconstructed	1932	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	1	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT	2019	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	3 Intolerable - Correct
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	May 31, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	Y 24 05/31/2019
47 Total Horizontal Clearance	14.4 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 07/16/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	14.8 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-109-09.0

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 17-109-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	732	96	700	4	32	0	0	0	0
7000/1:Damage	sq.ft	32	0	0	100	32	0	0	0	0
Notes:Collision damage - 5/31/2019										
113/1:Steel Stringer	ft	400	0	0	0	0	0	0	100	400
1000/1:Corrosion	ft	400	0	0	0	0	0	0	100	400
Notes:steel rusted and paint faded over 100%of structure - 5/31/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
Notes:faded and rusted over 100% of structure - 5/31/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Protective system failed and rusting is on 100% of the structure. - 5/31/2019										
120/1:Steel Truss	ft	98	0	0	0	0	50	49	50	49
1000/1:Corrosion	ft	98	0	0	0	0	50	49	50	49
Notes:steel rusted and paint faded on 100% of structure - 5/31/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:protection system has failed causing underlying metal to rust - 5/31/2019										
152/1:Steel Floor Beam	ft	52	0	0	0	0	62	32	39	20
1000/1:Corrosion	ft	32	0	0	0	0	100	32	0	0
Notes:faded and rusted 100% of bridge - 5/31/2019										
1900/1:Distortion	ft	20	0	0	0	0	0	0	100	20
Notes:5th beam from west is shifting east, also outside beams have distorted from ice collision most likely - 5/31/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:system has failed causing underlying metal to rust - 5/31/2019										
215/1:Re Conc Abutment	ft	36	0	0	0	0	100	36	0	0
1190/1:Abrasion(PSC/RC)	ft	36	0	0	0	0	100	36	0	0
Notes:Both abutments showing advancing signs of abrasion / deterioration - 5/31/2019										
231/1:Steel Pier Cap	ft	36	0	0	0	0	94	34	6	2
1000/1:Corrosion	ft	34	0	0	0	0	100	34	0	0
Notes:rusting of entire cap - 5/31/2019										
1020/1:Connection	ft	2	0	0	0	0	0	0	100	2
Notes:Missing bolts on Nw and Sw corners - 5/31/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:protective system failed causing underlying metal to rust - 5/31/2019										
330/1:Metal Bridge Railing	ft	98	0	0	0	0	95	93	5	5
1000/1:Corrosion	ft	93	0	0	0	0	100	93	0	0
Notes:Rusting over 100% of rail - 5/31/2019										
7000/1:Damage	ft	5	0	0	0	0	0	0	100	5

Structure Number: 17-109-09.0

Notes:bent down and out at all corners, cracked area East side - 5/31/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:System has failed causing underlying metal to rust. - 5/31/2019										
8401/1:Wings	each	4	0	0	0	0	0	0	100	4
6000/1:Scour	each	3	0	0	0	0	0	0	100	3
Notes:Scour and Erosion evident behind all wings and banks - 5/31/2019										
7000/1:Damage	each	1	0	0	0	0	0	0	100	1
Notes:SW wing is completely gone - 5/31/2019										

Remarks: NBI Remarks: Rail on structure bent down & out. Side truss and bottom lateral bent. Steel badly rusted. Concrete cracked & spalled / moderate abrasion on both abutments. Poor roadway alignment on both sides of structure, curve, dip & trees along roadway. Trees & brush in channel. Steel rusted & paint faded over 100% of structure. Erosion evident behind all wings & behind the S.W. Corner of abutment. No bridge end markers. New 3 x 11 deck plank installed. Old 3 x 11 planks re- placed in wheel paths. Fifth beam from the west is shifting east, see pictures. Sw wing wall completely gone. Channel beam piles are bowed in towards stream. 11/15/2013 - FC Inspected. 8/7/2017 - Sway braces and gusset connections have been fixed. thus critical finding removed and bridge re-opened. 5.31.19 - NE wing has erosion leading into bank, SW wing area also has erosion and bank is slumping into stream for 20'-30' Collision damage on SE and SW outside beams Signs still up on either end that say road closed 500'. - 5/31/2019

Alert Code 1: U3 - L2 and U1 - L1 trusses are bent on west side. - 5/31/2019

Alert Code 2: West channel beam bent and cracked at 3 locations at SW corner. 11/15/ 2013 - 2nd, 3rd and 4th beam from west shifting east. 11/02/2011 - West sway braces bent and broken with missing bolts. - 5/31/2019

Fracture Critical: 5.31.19 - Done with no new findings, upper truss members able to be viewed by standing on members/deck, lower members with a ladder. - 5/31/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-109-28.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	79.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Major Collector
04 City	BEACH TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01728 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF SENTINEL BUTTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.799	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 51' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	129800.3 5207648.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	5 Moderate Damage
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1933 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	375 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	WPH-49
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Eslinger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 6X10X60' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 17-109-28.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	121	0	0	58	70	42	51	0	0
1080/2:Delamination/Spall/Patched Area	ft	36	0	0	0	0	100	36	0	0
Notes:There is a lot of spalling on the NW & SE corners which extends into the roof of the box and the wings. - 5/6/2019										
1090/2:Exposed Rebar	ft	15	0	0	0	0	100	15	0	0
Notes:Exposed rebar at the parapet on both the NW & SE corners at the tie with the wings. Also extends into the roof areas. - 5/6/2019										
1120/2:Efflorescence/Rust Staining	ft	30	0	0	100	30	0	0	0	0
Notes:A lot of efflorescent staining at the NW & SW corners of the outside walls. Efflorescent staining at the cracks on the interior walls. - 5/6/2019										
1130/2:Cracking (RC and Other)	ft	40	0	0	100	40	0	0	0	0
Notes:Cracking throughout the walls of the box. - 5/6/2019										
8401/2:Wings	each	4	0	0	50	2	50	2	0	0
1130/2:Cracking (RC and Other)	each	2	0	0	0	0	100	2	0	0
Notes:The NW & SE wings each have a large vertical crack through them. - 5/6/2019										
1190/2:Abrasion(PSC/RC)	each	2	0	0	100	2	0	0	0	0
Notes:The surfaces of the wings are showing varying degrees of abrasion. - 5/6/2019										

Remarks: PAVEMENT ROAD TOP IS SETTLING ACROSS ENDS OF BARREL WALLS. ALL INNER WALLS HAVE CRACKS & EFFLORESCENT STAINING. 5/6/19 - There is erosion behind the NE wing. - 5/6/2019

Alert Code 2: 11-12-2013 - Concrete spalled & exposed rebar where wing & parapet are tied at NW & SE corners. Roof & parapet spalled & exposed rebar. - 5/6/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-109-43.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Local
04 City	LONE TREE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BULLION CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 6 EAST GOLVA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 42' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 51' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	128517.5 5184454.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2014 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	July 31, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	29.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/13/2014
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0017(014)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Strand
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 14 X 10 X 54' PCRCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-109-43.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
245/3:Pre Concrete Culvert	ft	108	100	108	0	0	0	0	0	0
Notes:_										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/2014 - Bridge replaced with a 14' x 10' x 54' pcrb

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-110-29.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Major Collector
04 City	SENTINEL BUTTE CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01711 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	IN SENTINEL BUTTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	18.996	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 50' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	131483.8 5206994.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 35 63 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 38 Tons
208 Dk Overburden	24 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1959 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	150 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	May 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	24 Ft.	Other Special	N
49 Structure Length	26.90 Ft.	218 Channel Profile	1 48 07/11/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/09/2017
	27.6 Ft.	213 Federal Aid Project Number	CS-445(8)
52 Deck Width	28.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 17-110-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	243	95	230	5	13	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
Notes:second channel beam from east exposer rebar spalling and delam. at north half of beam - 5/20/2019										
1090/1:Exposed Rebar	ft	3	0	0	100	3	0	0	0	0
Notes:second channel beam from east exposer rebar spalling and delam at north half of beam - 5/20/2019										
206/1:Timber Column	each	24	100	24	0	0	0	0	0	0
216/1:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	52	100	52	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	52	50	26	50	26	0	0	0	0
Notes:new railing installed west side - 5/20/2019										
1140/1:Decay/Section Loss	ft	26	0	0	100	26	0	0	0	0
Notes:East rail showing signs of decay - 5/20/2019										
8401/1:Wings	each	4	25	1	75	3	0	0	0	0
6000/1:Scour	each	3	0	0	100	3	0	0	0	0
Notes:sw, nw, ne wings have been filled in with asphalt to take care of erosion. erosion west side wing walls showing thru to abutment - 5/20/2019										

Remarks: 11/13/2013 - New railing installed west side. 9/01/2015 - SW, NW, NE wings have been filled in with asphalt to take care of erosion 7/31/17 - Erosion on West side wingwalls showing through to abutment. 6-20-19 no changes - 5/20/2019

Alert Code 2: Second channel beam from east exposed rebar spalling and delamination at north half of beam. - 5/20/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-112-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	27.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Local
04 City	ELK CREEK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	15 NORTH 8 EAST OF BEACH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 08' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 48' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	135228.8 5231369.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 20 37 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 14 26 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	2 Intolerable - Replace
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	6 Equal Minimum
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	23 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 05, 2019
32 Approach Roadway Width	11 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	9.5 Ft.	Other Special	N
48 Length of Max Span	37 Ft.	218 Channel Profile	1 48 07/11/2019
49 Structure Length	40.03 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	9.8 Ft.	213 Federal Aid Project Number	
52 Deck Width	12.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Strand
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 17-112-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	484	96	464	4	20	0	0	0	0
1150/1:Check/Shake	sq.ft	20	0	0	100	20	0	0	0	0
Notes:Deck planking looks checked. Also appears to have one possibly loose runner plank. - 9/5/2019										
107/1:Steel Opn Girder/Beam	ft	161	0	0	100	161	0	0	0	0
1000/1:Corrosion	ft	161	0	0	100	161	0	0	0	0
Notes:Corrosion of the girders has initiated. - 9/5/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Protection system has failed, no paint and metal is beginning to corrode. - 9/5/2019										
217/1:Masonry Abutment	ft	20	0	0	100	20	0	0	0	0
Notes:County came out and lifted the deck and made repairs to the abutments and added in new planks for beam seats and installed rip rap around the entire structure. - 9/5/2019										
1640/1:Masonry Displacement	ft	20	0	0	100	20	0	0	0	0
Notes:County came out and lifted the deck and made repairs to the masonry abutment, and installed new boards for beam seats. - 9/5/2019										
332/1:Timb Bridge Railing	ft	82	76	62	24	20	0	0	0	0
Notes:County repaired the abutments and that brought the railings back into alignment for the most part, there still seems to be a little wobble in the runs if you view them, but they are better now then when we had closed it. - 9/5/2019										
1180/1:Abrasion	ft	20	0	0	100	20	0	0	0	0
Notes:Railing is showing signs of wear. - 9/5/2019										
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
Notes:Slope protection rip rap added on both abutment sides, NW corner could use more to fill in the hole. - 9/5/2019										
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:NW abutment corner rip rap either settled or they didn't fill it in well enough when they added and there is a slight scour hole starting to form and will fill in with debris. - 9/5/2019										

Remarks: LOW WATER CROSSING WEST OF BRIDGE APPROX 50 FT. BRIDGE IS A FLATBED RAILROAD CAR FRAME SETTING ON LARGE SANDSTONE ABUTMENTS. BRIDGE HAS A NEW 3X12 WOOD DECK WITH 3X12 LONGITUDINAL WOOD RUNNERS. BRIDGE HAS A NEW 6X12 TIMBER RAIL. BRIDGE HAS 3X12 WOOD SPACERS BETWEEN THE DECK AND TOP OF GIRDERS AND BOLTED TO THE DECK ON THE OUTER ENDS. 6/3/19 - Abutment south side has slid out of place and bridge has settled 1' to 1-1/2' at SE corner. Debris under deck on the North and South sides. Spoke to landowner that lives near the bridge, he said a gravel truck did the damage, they use the bridge a lot when the low water crossing that is close to it is under water. Bridge is closed until they can repair it or replace it. Will call us when they have a fix in place and we will go inspect it again. - 6/3/2019 9.5.19 - County repaired this structure and sent in an inspection notification request to have us come back out and reinspect it before opening. They repaired and reset the abutment and added new 3x12 planks for beam seats and shims to level the structure, they also added in riprap. Can no longer view the abutments are they are covered entirely with the new riprap, as of the inspection the bridge no longer appears to be settling, but the corners still seemed to have slight distortion in them yet, the rails seem to be tilted outward. Recommend this structure gets a posting limit so it doesn't deteriorate from heavy loads anymore. Informed the county after the inspection that the NW corner could use either more riprap to fill in the hole that was left or to grade it better to fill in. Removed critical finding as the settling has been fixed. - 9.5.19 - 9/5/2019

Alert Code 2: 6/3/19 - Cracked masonry abutment that has settled. - 9/5/19 - moved from alert code 3, county has repaired settling but it is still cracked. - 9/5/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-112-28.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Local
04 City	SENTINEL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST SENTINEL BUTTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 48' 37.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	133825.7 5208288.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 24 44 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 17 31 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	32 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1938 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 30, 2019
32 Approach Roadway Width	23 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	29.9 Ft.	Other Special	N
48 Length of Max Span	32 Ft.	218 Channel Profile	1 48 07/11/2019
49 Structure Length	100.07 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	03/19/2018
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-112-28.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	3,003	0	0	100	3,003	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	3,003	0	0	100	3,003	0	0	0	0
Notes:Timber deck was showing signs of decay, has since been overlaid with asphalt. - 5/30/2019										
510/1:Wearing Surfaces	sq.ft	3,003	100	3,003	0	0	0	0	0	0
Notes:Asphalt overlay - 5/30/2019										
111/1:Timber Open Girder	ft	1,401	100	1,401	0	0	0	0	0	0
206/1:Timber Column	each	28	100	28	0	0	0	0	0	0
216/1:Timber Abutment	ft	69	0	0	100	69	0	0	0	0
6000/1:Scour	ft	69	0	0	100	69	0	0	0	0
Notes:erosion on both abutments but more pronounced on West Abutment, see photo - 5/30/2019										
235/1:Timber Pier Cap	ft	135	100	135	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	200	90	180	0	0	0	0	10	20
1160/1:Crack (Timber)	ft	20	0	0	0	0	0	0	100	20
Notes:NE and SE side have cracked sections - 5/30/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/13/2013 - Rail on NE side has 2 sections decaying and 1 section broke. 11/13/2013 - Rail on SE side has 1 section broke. 5-30-19 no changes - 5/30/2019

Alert Code 1: Erosion on the west abutment-see pictures. - 5/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-112-28.3

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	83.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Local
04 City	SENTINEL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ANDREWS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST SENTINEL BUTTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 48' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	134542.6 5208781.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 20 37 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 14 26 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	33 Asphalt	209 Posted in "Tons"	35 Tons
Age and Service		Appraisal	
27 Yr Built	1938 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	3 Intolerable - Correct
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 30, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	29.9 Ft.	Other Special	N
48 Length of Max Span	32 Ft.	218 Channel Profile	1 48 07/11/2019
49 Structure Length	92.85 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	03/19/2018
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 17-112-28.3

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	2,788	100	2,788	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	2,788	100	2,788	0	0	0	0	0	0
Notes:Overlaid with asphalt - 5/30/2019										
111/1:Timber Open Girder	ft	1,302	100	1,302	0	0	0	0	0	0
206/1:Timber Column	each	29	0	0	97	28	3	1	0	0
1170/1:Split/Delamination (Timber)	each	29	0	0	97	28	3	1	0	0
Notes:All columns showing minor signs of delamination, 1 column split - 5/30/2019										
216/1:Timber Abutment	ft	69	0	0	100	69	0	0	0	0
1140/1:Decay/Section Loss	ft	69	0	0	100	69	0	0	0	0
Notes:Abutments showing signs of decay / section loss - 5/30/2019										
235/1:Timber Pier Cap	ft	135	100	135	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	187	95	177	0	0	5	10	0	0
1150/1:Check/Shake	ft	10	0	0	0	0	100	10	0	0
Notes:1 section on each side is damaged / checked - 5/30/2019										
8398/1:Slope Protection	each	1	0	0	0	0	100	1	0	0
1220/1:Deterioration (Other)	each	1	0	0	0	0	100	1	0	0
Notes:Riprap on West slope that was placed to help erosion is sliding down the bank. - 5/30/2019										
8401/1:Wings	each	4	0	0	50	2	25	1	25	1
1140/1:Decay/Section Loss	each	2	0	0	100	2	0	0	0	0
Notes:Wings are decaying, working from the top down - 5/30/2019										
6000/1:Scour	each	1	0	0	0	0	100	1	0	0
Notes:NW wing has erosion working under the backwall. - 5/30/2019										
7000/1:Damage	each	1	0	0	0	0	0	0	100	1
Notes:NE wing is damaged, see photo. - 5/30/2019										

Remarks: WING PILE ARE DECAYING ON TOP. EROSION ALONG DITCH AND CHANNEL BANK SOUTH DITCH. SOME RIP RAP PLACED ON WEST ABUT. 30'X10'. NE WING HAS DAMAGE. N.W. WING HAS EROSION UNDER BACKWALL. SEE PICTURES. 8/31/2015 - NE corner of bridge , roadway undermining into roadway 4' x 4' 8/1/17 - 1 section of guardrail on North side and 1 on South side is damaged. 5-30-19 scour hole s e wing wall moving into ditch, rip rap west wall falling out - 5/30/2019

Alert Code 1: Nw corner of abut. has erosion behind backwall. - 5/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-112-35.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Major Collector
04 City	SENTINEL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01711 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N. BRANCH GARNER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 S. 2 E. SENTINEL BUTTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	11.797	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 47' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	134134.5 5197301.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 28 51 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 31 Tons
208 Dk Overburden	24 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1955 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	3 SC - Unstable
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	May 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.0 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 07/11/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/09/2017
	22.0 Ft.	213 Federal Aid Project Number	CS-445(6)
52 Deck Width	23.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 17-112-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	678	100	678	0	0	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	249	100	249	0	0	0	0	0	0
206/1:Timber Column	each	22	0	0	91	20	9	2	0	0
Notes:piles are bowed in on both abut - 5/20/2019										
1140/1:Decay/Section Loss	each	20	0	0	100	20	0	0	0	0
Notes:All piling showing signs of decay - 5/20/2019										
1160/1:Crack (Timber)	each	2	0	0	0	0	100	2	0	0
Notes:1 column in each abutment is cracked - 5/20/2019										
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1900/1:Distortion	ft	49	0	0	100	49	0	0	0	0
Notes:piles bowed in both abutments - 5/20/2019										
235/1:Timber Pier Cap	ft	49	0	0	100	49	0	0	0	0
1900/1:Distortion	ft	49	0	0	100	49	0	0	0	0
Notes:Cap is tilted along with the bowing of the piling into the stream. - 5/20/2019										
331/1:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	62	84	52	16	10	0	0	0	0
1140/1:Decay/Section Loss	ft	52	100	52	0	0	0	0	0	0
Notes:Railing is showing signs of decay or section loss starting. - 5/20/2019										
1180/1:Abrasion	ft	10	0	0	100	10	0	0	0	0
Notes:1 section of rail has abrasion damage - 5/20/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
4000/1:Settlement	each	4	0	0	100	4	0	0	0	0
Notes:all wings are pushed into stream - 5/20/2019										

Remarks: PILES ARE BOWED IN ON BOTH ABUTMENTS. WINGS ARE PUSHED INTO STREAM. DEEP SCOUR IN CHANNEL UNDER BRIDGE 3 FOOT DEPTH. PILING ARE CRACKED, N & S ABUTMENTS. 5.20.19 - No deck listed on si&a, should there be on pontis? - 5/20/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-112-37.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Major Collector
04 City	GARNER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01711 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	S. BRANCH GARNER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 EAST 4 NORTH GOLVA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.998	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 47' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 47' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	133737.1 5192914.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 29 53 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 14 26 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	212 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	60 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	0.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	3 SC - Unstable
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 06, 2019
32 Approach Roadway Width	21 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.0 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 07/11/2019
49 Structure Length	40.03 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	22.0 Ft.	213 Federal Aid Project Number	CS-445(6)
52 Deck Width	23.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Eslinger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 17-112-37.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	883	95	839	5	44	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	44	0	0	100	44	0	0	0	0
Notes:Deck has delaminated areas but is covered with overburden. - 5/6/2019										
110/1:Re Conc Opn Girder/Beam	ft	279	100	279	0	0	0	0	0	0
206/1:Timber Column	each	22	0	0	91	20	9	2	0	0
1140/1:Decay/Section Loss	each	20	0	0	100	20	0	0	0	0
Notes:All columns have some decay at the waterline. - 5/6/2019										
1160/1:Crack (Timber)	each	2	0	0	0	0	100	2	0	0
Notes:North abutment the 3rd column from the east is cracked. South abutment the east most column is cracked. - 5/6/2019										
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1900/1:Distortion	ft	49	0	0	100	49	0	0	0	0
Notes:Both abutments are slightly tilted. - 5/6/2019										
235/1:Timber Pier Cap	ft	49	0	0	100	49	0	0	0	0
1900/1:Distortion	ft	49	0	0	100	49	0	0	0	0
Notes:Both pier caps are tilted slightly. - 5/6/2019										
331/1:Re Conc Bridge Railing	ft	79	100	79	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	79	100	79	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: SOUTH ABUTMENT CAP IS TILTED SLIGHTLY. SOME EROSION OF THE EMBANKMENT AROUND THE WINGS. PILING PUSHING OUT DUE TO EMBANKMENT PRESSURE N. & S. ABUTMENTS. DEEP SCOUR IN CHANNEL UNDER BRIDGE, 2 FOOT DEPTH. NORTH ABUTMENT HAS ONE BROKEN PILE, REMAINDER HAVE CRACKS. NORTH ABUTMENT AT BOTTOM SHOWING DECAY BECAUSE OF ALKALI WATER. ONE PILE IS CRACKED ON THE SOUTH ABUTMENT. 5/6/19 - The scour under the bridge is approx. 4' deep in the middle. - 5/6/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-112-44.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Major Collector
04 City	BULLION TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01711 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BULLION CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 EAST 2 SOUTH OF GOLVA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.999	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 42' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 47' 52.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	133244.9 5183153.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	66 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	40 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1963 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	60 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	0.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	7 Countermeasures
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 06, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.2 Ft.	Other Special	N
48 Length of Max Span	37 Ft.	218 Channel Profile	1 48 07/11/2019
49 Structure Length	40.03 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	03/19/2018
51 Bridge Rdwy Width - Curb to Curb	28.5 Ft.	213 Federal Aid Project Number	CS-445(11)
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Eslinger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-112-44.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	400	100	400	0	0	0	0	0	0
206/1:Timber Column	each	23	0	0	70	16	30	7	0	0
1140/1:Decay/Section Loss	each	16	0	0	100	16	0	0	0	0
Notes:All columns have some section loss at the waterline. - 5/6/2019										
1160/1:Crack (Timber)	each	1	0	0	0	0	100	1	0	0
Notes:3rd column from west on the north side is cracked. - 5/6/2019										
1900/1:Distortion	each	6	0	0	0	0	100	6	0	0
Notes:The north abutment columns are tilted away from stream at least 5". - 5/6/2019										
216/1:Timber Abutment	ft	59	0	0	51	30	49	29	0	0
1900/1:Distortion	ft	59	0	0	51	30	49	29	0	0
Notes:The north abutment is tilted away from the stream at least 5". The south abutment is slightly tilted. - 5/6/2019										
235/1:Timber Pier Cap	ft	59	0	0	51	30	49	29	0	0
1900/1:Distortion	ft	59	0	0	51	30	49	29	0	0
Notes:The north pier cap is tilted away from stream at least 5". The south pier cap is slightly tilted. - 5/6/2019										
330/1:Metal Bridge Railing	ft	79	100	79	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	79	75	59	25	20	0	0	0	0
1160/1:Crack (Timber)	ft	20	0	0	100	20	0	0	0	0
Notes:There are a number of minor cracks on the curb. A crack on the SE corner has begun to peel loose. - 5/6/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1900/1:Distortion	each	4	0	0	100	4	0	0	0	0
Notes:The wings are tilted back somewhat at the top. - 5/6/2019										

Remarks: NORTH ABUTMENT TILTS BACK 15 INCHES AT ABUTMENT CAP. RIP RAP PLACED AROUND ABUTMENT & WINGS. NE WING HAS BEEN REPAIRED WITH STEEL PILE. 7/31/17 - NW wingwall starting to push out towards stream. - 5/6/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-113-23.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	KNUTSON CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 N. 2 E. SENTINEL BUTTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 59' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 47' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	135910.4 5216057.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1984 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	15 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 01, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-17(3)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Strand
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X6X124' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-113-23.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	249	99	246	1	3	0	0	0	0
1130/3:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: RIP RAP PLACED ON BOTH SIDES OF BOX. 1/4 TO 3/8" WIDE CRACKS ALONG JOINT EAST END.
 EROSION ON N.W. COR. OF R.C.B. WEST PARAPET HAS HAIRLINE CRACKING. 8/1/17 - No riprap was found on either end.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 17-114-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Local
04 City	SENTINEL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 E 1 N SENTINEL BUTTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 46' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	136768.5 5208766.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	4 Protection Undermined
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	M 13.5 (H 15) (live load for which structure was designated)
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 24 44 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden N	Not Applicable	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	N Not applicable (NBI)
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	N N 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 30, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	8 Ft.	218 Channel Profile	N
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
TRIPLE, 8X6X60' RCB			

Structure Number: 17-114-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	180	0	0	100	180	0	0	0	0
Notes:const joints separated 3/4", only 2' clearance on South end inside box - 5/30/2019										
1080/2:Delamination/Spall/Patched Area	ft	160	0	0	100	160	0	0	0	0
Notes:spalls / popouts on the South parapet, and cracks / delamination along walls of box - 5/30/2019										
1120/2:Efflorescence/Rust Staining	ft	20	0	0	100	20	0	0	0	0
Notes:staining on roof and corners where box ties into wings - 5/30/2019										
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
1130/2:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:minor cracks - 5/30/2019										

Remarks: CONSTRUCTION JOINTS SEPARATED 3/4". SOME RUST STAINS ON ROOF OF BOX. ONLY 2' CLEARANCE ON SOUTH END INSIDE BOX. 11/12/2013 - South parapet has minor popouts and cracking. 8/1/17 - Minor popouts/spalling on South end of parapet. Minor cracks on wingwalls. - 5/30/2019

Alert Code 1: 11/12/2103 - North ground elevation is one to two feet higher then inlet of box causing restriction of water flow. silt coming into box at construction joints. 8/1/17 - North & South ends of culvert have filled to 2-3 feet higher than inlet of the box causing water flow restriction. - 5/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-116-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
6 Fed Lands F 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 10 EAST TROTTERS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Forest Highway (FH)
16 Latitude	47d 16' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 42' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	143378.3 5247293.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 26 48 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.9 Ft.	Underwater	N
48 Length of Max Span	53 Ft.	Other Special	N
49 Structure Length	146.00 Ft.	218 Channel Profile	1 48 07/11/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.9 Ft.	212 Structure Load Rated	12/16/1996
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	CFH-2-1(01)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Martin, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 17-116-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,230	70	2,961	30	1,269	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	1,269	0	0	100	1,269	0	0	0	0
Notes:Deck is showing signs of abrasion / wear, able to see aggregate in some areas. - 6/3/2019										
104/1:Pre Clsd Box Girder	ft	584	100	584	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	59	66	39	34	20	0	0	0	0
6000/1:Scour	ft	20	0	0	100	20	0	0	0	0
Notes:Erosion / scour around East pier wall, slope protection failing and sliding into stream also in this area. - 6/3/2019										
215/1:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	292	100	292	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:East slope protection sliding into stream, erosion around East pier. - 6/3/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: MINOR STAINING OF SOFFIT. 11/02/2011 - Minor cracking on deck. 8/1/17 - Slope protection on East side sliding into stream bed. 6-3-19 bridge end markers east end bridge broke - 6/3/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-117-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Local
04 City	SENTINEL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST OF SENTINEL BUTTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 41' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	142381.8 5206741.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	4 Protection Undermined
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1938 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	9 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Martin, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD, TRIPLE 5X4' & SINGLE 9X4X54' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 17-117-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	217	89	193	0	0	11	24	0	0
1080/2:Delamination/Spall/Patched Area	ft	10	0	0	0	0	100	10	0	0
Notes:parapet spalled and delaminated - 5/30/2019										
1090/2:Exposed Rebar	ft	4	0	0	0	0	100	4	0	0
Notes:exposed rebar south end where walls and parapet tie - 5/30/2019										
1120/2:Efflorescence/Rust Staining	ft	10	0	0	0	0	100	10	0	0
Notes:staining inside box barrel 2 from east - 5/30/2019										
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
1130/2:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:All wings are cracking, most prevalent where they tie into box - 5/30/2019										

Remarks: MINOR CRACKING WHERE WINGS & WALL TIE TO PARAPET. 11/12/2013 - PARAPET ON NORTH AND SOUTH END CRACKED AND SPALLED. 8/31/2015 - North end of box has debris blocking barrels 8/1/17 - Both ends completely blocked by trees & debris, box is 1/2 full of silt. 5-30-19 eff staining inside box barrel 2 from east. - 5/30/2019

Alert Code 2: Exposed rebar South end where wall & parapet tie. - 5/30/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-120-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Local
04 City	SENTINEL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 EAST SENTINEL BUTTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 38' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	146917.3 5206660.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1938 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2017	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 01, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Strand
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 6X10X70' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-120-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	141	0	0	95	134	5	7	0	0
1080/2:Delamination/Spall/Patched Area	ft	5	0	0	0	0	100	5	0	0
1090/2:Exposed Rebar	ft	2	0	0	0	0	100	2	0	0
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
1130/2:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
1190/2:Abrasion(PSC/RC)	each	2	0	0	100	2	0	0	0	0

Remarks: SOME BRUSH IN CHANNEL NORTH SIDE. CONCRETE. CRACKED ON ROOF OF WEST BARREL NORTH END OF OLD PORTION OF BOX. SOME SETTLEMENT AT CONSTRUCTION JOINTS. 11/12/2013 - APPROXIMATELY 3 FOOT OF DIRT SETTLEMENT IN WEST BARREL.

Alert Code 2: SE parapet spalled, delamination, and exposed rebar. NW & SE corners at parapet & wing connectios are cracked, spalled & exposed rebar.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-121-36.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Golden Valley	26 Functional	Rural, Local
04 City	SENTINEL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GARNER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	18 EAST 5 NORTH OF GOLVA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 37' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	147635.6 5193777.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 28 51 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1999 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	16 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	89 Ft.	Other Special	N
49 Structure Length	89.90 Ft.	218 Channel Profile	1 48 07/11/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/22/2000
	28.5 Ft.	213 Federal Aid Project Number	BRO-17(5)
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Eslinger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 17-121-36.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,777	100	2,777	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	361	100	361	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	180	100	180	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-101-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	47.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ELKMOUNT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SO BRANCH FOREST RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 12 WEST INKSTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 09' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 53' 23.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	582546.6 5335338.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 13 23 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 5 10 Tons
208 Dk Overburden	1 None	70 Bridge Posting	1 30.0-39.9%below
Age and Service		209 Posted in "Tons"	23 Tons
27 Yr Built	1959 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	2 Intolerable - Replace
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT	71 Waterway Adequacy	4 Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	Y 24 10/08/2019
47 Total Horizontal Clearance	24.9 Ft.	Underwater	N
48 Length of Max Span	36 Ft.	Other Special	N
49 Structure Length	39.04 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	25.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 18-101-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	980	100	980	0	0	0	0	0	0
113/2:Steel Stringer	ft	740	73	540	27	200	0	0	0	0
1000/2:Corrosion	ft	200	0	0	100	200	0	0	0	0
Notes:Corrosion to various areas within the Steel Stringers. - 10/8/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	50	50	0	0	50	50
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	50	50	0	0	50	50
Notes:Loss of effectiveness to coating. - 10/8/2019										
120/2:Steel Truss	ft	79	0	0	0	0	100	79	0	0
1000/2:Corrosion	ft	79	0	0	0	0	100	79	0	0
Notes:Rusting to Steel Truss. - 10/8/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	50	50	50	50
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	50	50	50	50
Notes:Loss of effectiveness to coating. - 10/8/2019										
152/2:Steel Floor Beam	ft	56	0	0	100	56	0	0	0	0
1000/2:Corrosion	ft	56	0	0	100	56	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Loss of effectiveness to coating. - 10/8/2019										
206/2:Timber Column	each	14	93	13	7	1	0	0	0	0
1170/2:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes:Pile 6 East Abutment open 3/8" on top. - 10/8/2019										
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	97	57	0	0	3	2	0	0
1170/2:Split/Delamination (Timber)	ft	2	0	0	0	0	100	2	0	0
Notes:Split to West Cap. - 10/8/2019										
332/1:Timb Bridge Railing	ft	79	100	79	0	0	0	0	0	0
7357/2:Pack Rust	each	1	0	0	100	1	0	0	0	0
Notes:Top Connection Plates to Truss. See Photo. - 10/8/2019										
8398/2:Slope Protection	each	2	50	1	0	0	50	1	0	0
4000/2:Settlement	each	1	0	0	0	0	100	1	0	0
Notes:Slope Protection along West Abutment settled into channel. - 10/8/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor horizontal and vertical roadway alignment. Poor channel alignment. Most stringers repainted in 2004. New deck, timber curb and 5 new stringers in 2004. Bank erosion south of structure. D-D section L0 to L0' southside is bent. Old concrete abutment in channel under structure. All horizontal sway braces missing under structure. Metal railing removed. Pack rust forming at upper connection plates. Slope protection displaced @ the west abutment. Pile 6 east abutment is split open 3/8". Structure Posted to 23 Tons. No additional equipment used for the Fracture Critical Inspection. - 10/8/2019

Alert Code 1: Bump at both ends of Bridge. - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-101-04.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	55.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ELKMOUNT TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	11 WEST 1 SOUTH INKSTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 08' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 52' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	583159.0 5332831.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 8 16 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 5 11 Tons
208 Dk Overburden	23 Gravel/Dirt	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	14 Tons
27 Yr Built	1949 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.9 Ft.	Underwater	N
48 Length of Max Span	24 Ft.	Other Special	N
49 Structure Length	26.90 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/19/2018
	24.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-101-04.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	614	100	614	0	0	0	0	0	0
111/2:Timber Open Girder	ft	405	100	405	0	0	0	0	0	0
206/2:Timber Column	each	12	92	11	8	1	0	0	0	0
1140/2:Decay/Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Pile 6 at NE Corner Split at top. See Photo. - 10/8/2019										
216/2:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	60	50	30	50	30	0	0	0	0
1150/2:Check/Shake	ft	30	0	0	100	30	0	0	0	0
Notes:Check/Shake to South Abutment Cap. - 10/8/2019										
330/1:Metal Bridge Railing	ft	52	100	52	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	52	100	52	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:North Slope Protection Displaced. - 10/8/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Some new deck plank, new timber caps, timber curb and posts in 2005. Some girders replaced in 2005. Poor horizontal roadway alignment. One split pile #6 northeast corner of north abutment. Channel bank erosion near NE wing corner. Some riprap displaced along the face of the north abutment. Channel bank erosion downstream. - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-103-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	67.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	OGAN CENTER TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 12 WEST NORTHWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 48' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 50' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	586741.7 5295019.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 11 21 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 8 15 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	21 Tons
Age and Service		Appraisal	
27 Yr Built	1982 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 24, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.9 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	1 48 05/16/2017
49 Structure Length	37.07 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	08/31/2016
51 Bridge Rdwy Width - Curb to Curb	24.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-103-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	926	100	926	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	440	0	0	100	440	0	0	0	0
1000/2:Corrosion	ft	440	0	0	100	440	0	0	0	0
Notes:Pitting and corrosion to all beams - see photo - 9/24/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
111/2:Timber Open Girder	ft	112	100	112	0	0	0	0	0	0
206/2:Timber Column	each	14	100	14	0	0	0	0	0	0
216/2:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	72	89	64	0	0	11	8	0	0
1170/1:Split/Delamination (Timber)	ft	8	0	0	0	0	100	8	0	0
Notes:Split timber curb south side. - 9/24/2019										
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: No railing. Rusting girders. Poor channel alignment. Rotting tops of wing pile. Channel bank erosion downstream side of structure. Beaver dam just north of structure. Poor vertical roadway alignment. Some pitting with minor section loss to beam ends both abutments. Some riprap displaced @ the west abutment exposing vertical backwall planks at the SW corner. Channel runs along the west abutment. - 9/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-103-34.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	51.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LORETTA TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	13 WEST 2 SOUTH NORTHWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 42' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 51' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	586160.6 5283730.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 17 32 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 11 20 Tons
208 Dk Overburden	1 None	70 Bridge Posting	3 10.0-19.9%below
Age and Service		209 Posted in "Tons"	0 Tons
27 Yr Built	1946 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2019	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	November 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.6 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	1 48 05/16/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-103-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	667	100	667	0	0	0	0	0	0
Notes:New Deck 2018. - 11/20/2019										
107/2:Steel Opn Girder/Beam	ft	121	100	121	0	0	0	0	0	0
Notes:New Girders in 2018. Inspection incomplete due to High Water. See Photo. 10/28/2019. - 11/20/2019										
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
Notes:Girders coated with protecting paint in rehab in 2018. Inspection incomplete due to High Water. See Photo. 10/28/2019. - 11/20/2019										
111/2:Timber Open Girder	ft	610	100	610	0	0	0	0	0	0
Notes:Timber Girders removed and replaced with 5 new. Inspection incomplete due to High Water. See Photo. 10/28/2019. - 11/20/2019										
206/3:Timber Column	each	14	71	10	7	1	0	0	21	3
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. - 11/20/2019										
1140/3:Decay/Section Loss	each	3	0	0	33	1	0	0	67	2
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. - 11/20/2019										
7000/3:Damage	each	1	0	0	0	0	0	0	100	1
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. - 11/20/2019										
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. - 11/20/2019										
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. - 11/20/2019										
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	30	30	70	70	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co	sq.ft	70	0	0	100	70	0	0	0	0
Notes:Peeling of coating to both railing. See Photo. - 11/20/2019										
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
1140/3:Decay/Section Loss	each	2	0	0	100	2	0	0	0	0
Notes:Decay to wing piles to NE and NW Wings. - 11/20/2019										

Remarks: No curb. Rotting of wing piling. Poor vertical roadway alignment. 5/2017 - Scour hole under structure 10' x 15' x 3' deep. Rehabbed in 2018 by County Forces. Posted Signs removed from both ends of Bridge. 10/28/2019. In 2018, County Forces replaced girders, cap, and timber deck. County Also bolted 16" Channel Iron to Piles 1,2 & 5 East Abutment for impact damage protection. Inspection completed on 11/20/2019. - 11/20/2019

Alert Code 2: Piles 4 & 5 at the east abutment rotting near water line. Ice impact damage to pile #1 - east abutment with up to 50% section loss. - 11/20/2019

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SEC 409

Structure Number: 18-103-35.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	LORETTA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01803 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	12 WEST 3 SOUTH NORTHWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.500	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 50' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	587077.8 5282806.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1950 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2013	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 02, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10'X9'X37' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Structure Number: 18-103-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	75	84	63	16	12	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	12	0	0	100	12	0	0	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	10	100	10	0	0	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [] NBI Remarks: Minor verticle cracks in walls. Spalling and cracking at the SW wing corner with minor separation. Some spalling with minor section loss lower portion outside walls. 10/2015 - In 2015 county forces added 10' RC widenings at the NW and NE wings. Metal straps bolted to wing corners all 4 wings. Rock riprap added at all wing corners see photos. Crack at the SW wing corner filled with epoxy material.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-104-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ELKMOUNT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SO BRANCH FOREST RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 8 WEST INKSTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 09' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 49' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	587717.5 5335406.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 26 47 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 18 33 Tons
208 Dk Overburden	23 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	September 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.3 Ft.	Underwater	N
48 Length of Max Span	32 Ft.	Other Special	N
49 Structure Length	35.10 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	26.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 18-104-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	883	100	883	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	413	76	313	24	100	0	0	0	0
1000/2:Corrosion	ft	100	0	0	100	100	0	0	0	0
Notes:Surface corrosion to most beams - 9/23/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
111/2:Timber Open Girder	ft	174	90	156	6	10	5	8	0	0
1170/2:Split/Delamination (Timber)	ft	18	0	0	56	10	44	8	0	0
Notes:South outside girder split near the east abutment. - 9/23/2019										
206/2:Timber Column	each	14	86	12	7	1	7	1	0	0
1170/2:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes:Second pile from the north split at thee top and open to approximately 3/4". - 9/23/2019										
1900/2:Distortion	each	1	0	0	0	0	100	1	0	0
Notes:Pile #1 west abutment moving in and only support 20-30% of the cap. - 9/23/2019										
216/3:Timber Abutment	ft	59	51	30	49	29	0	0	0	0
1140/3:Decay/Section Loss	ft	7	0	0	100	7	0	0	0	0
Notes:Lower backwall plank west abutment rotting. - 9/23/2019										
1900/3:Distortion	ft	22	0	0	100	22	0	0	0	0
Notes:Top backwall plank west abutment tilting away - see photo. - 9/23/2019										
235/2:Timber Pier Cap	ft	66	97	64	2	1	2	1	0	0
1180/2:Abrasion	ft	2	0	0	50	1	50	1	0	0
Notes:North end west abutment. - 9/23/2019										
330/1:Metal Bridge Railing	ft	69	100	69	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	69	100	69	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor vertical roadway alignment. South outside timber girder split near the east abutment. Minor rotting on west abutment plank NW corner. Some channel bank erosion upstream & downstream. Lower back wall planks showing signs of rot west abutment. 9/2017 - Some minor roadway embankment filtration under west abutment. - 9/23/2019

Alert Code 1: West abutment cap & top backwall plank tilting away with approximately 60% to 80% sitting on piles 1 thru 4. Piles 1 & 2 cracked at the top west abutment. - 9/23/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-104-02.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	62.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ELKMOUNT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SO BRANCH FOREST RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	8 WEST 2 NORTH INKSTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 49' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	587955.0 5335501.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 11 20 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 6 12 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	24 Tons
27 Yr Built	1954 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	15 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	September 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.6 Ft.	Underwater	N
48 Length of Max Span	33 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	212 Structure Load Rated	08/29/2016
52 Deck Width	24.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-104-02.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	657	100	657	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	33	100	33	0	0	0	0	0	0
Notes:minor cracking underside of deck - 9/23/2019										
54/1:Timber Slab	sq.ft	229	100	229	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	335	0	0	100	335	0	0	0	0
1000/2:Corrosion	ft	335	0	0	100	335	0	0	0	0
Notes:minor surface rust all girders - 9/23/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
152/2:Steel Floor Beam	ft	26	0	0	0	0	100	26	0	0
1000/2:Corrosion	ft	26	0	0	0	0	100	26	0	0
Notes:corrosion throughout entire length - 9/23/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	43	16	7	79	34	5	2	0	0
1090/3:Exposed Rebar	ft	4	0	0	100	4	0	0	0	0
Notes:below waterline south abutment. water level too high for photo in 2019. - 9/23/2019										
1130/3:Cracking (RC and Other)	ft	2	0	0	0	0	100	2	0	0
Notes:lower portion north abutment. - 9/23/2019										
1190/3:Abrasion(PSC/RC)	ft	30	0	0	100	30	0	0	0	0
Notes:lower portion north abutment- see photo. - 9/23/2019										
330/1:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Rusty girders. Both abutments moving in, south abutment approximately 4", north abutment approximately 2 1/2". Poor vertical roadway alignment. Cracking along backwall at girders both abutments. Channel bank erosion both sides of structure. Diagonal crack in both west wings. Three 4" x 12" deck planks replaced on west side in 2003. - 9/23/2019

Alert Code 1: Channel bank erosion behind the NW wing. Section loss of 1" - 2" lower portion both abutments @ water line with exposed rebar south abutment. - 9/23/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-104-20.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	MORAIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01820 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE GOOSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	9 WEST OF LARIMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.799	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 54' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 49' 23.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	587952.5 5306309.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1987 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	325 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	16.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 17, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBRS-1820(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 8'X10'X60' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-104-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	180	100	180	0	0	0	0	0	0
1130/3:Cracking (RC and Other)	ft	30	100	30	0	0	0	0	0	0
Notes:Minor vertical and diagonal cracks in all walls and near upper wing corners. - 10/17/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Minor cracking upper wing corners. - 10/17/2019										

Remarks: NBI Remarks: Minor cracking at wing corners. Minor vertical & horizontal cracking in all walls. - 10/17/2019

Alert Code 2: Severe channel bank erosion at southwest corner of structure with erosion behind the southwest wing. - 10/17/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-104-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LORETTA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH 12 WEST NORTHWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 49' 60.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	587561.5 5282134.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 32 58 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 35 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	55 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 20, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	26.9 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	1 48 05/16/2017
49 Structure Length	36.09 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	1.0 Ft Lt-Side	212 Structure Load Rated	03/20/2018
51 Bridge Rdwy Width - Curb to Curb	26.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-104-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	325	98	318	0	0	2	7	0	0
1090/2:Exposed Rebar	ft	7	0	0	0	0	100	7	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Honeycombing causing spalling and exposed rebar to underside of Channel Beams. - 11/20/2019										
206/3:Timber Column	each	14	79	11	14	2	7	1	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. - 11/20/2019										
1140/3:Decay/Section Loss	each	1	0	0	0	0	100	1	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Pile 1 West Abutment decay section loss. See Photo. - 11/20/2019										
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Pile 6 and 7 East Abutment Split at top open 1/2". See photo. - 11/20/2019										
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	50	33	50	33	0	0	0	0
1900/2:Distortion	ft	33	0	0	100	33	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. West abutment cap bows out 2" at center. See Photo. - 11/20/2019										
330/1:Metal Bridge Railing	ft	72	96	69	0	0	4	3	0	0
7000/1:Damage	ft	3	0	0	0	0	100	3	0	0
Notes:Damage to South Railing approx mid span. See Photo. - 11/20/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/1:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Both slope protections settled and displaced. - 11/20/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Five different honeycomb locations with exposed reinforcing steel on bottom of beams. SW wing piling rotted. Vehicle damage to 3 guardrail posts south side railing unattached at the 2 SE corner posts. 5/2017 - Scour hole under structure 30' x 60' x 2' deep. 10/2017 - West abutment cap bows out 2" at center. Both slope protections displaced. Inspection incomplete due to High Water. See Photo. 10/28/2019. Inspection completed 11/20/2019. - 11/20/2019

Alert Code 1: Pile #1 west abutment rotted, timber pile #3 & 7 east abutment cracked near the top. Scour hole under structure 30' x 60' x 2.0' deep. - 11/20/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-105-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	44.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ELKMOUNT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SO BRANCH FOREST RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 8 WEST INKSTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 09' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 48' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	589035.9 5335421.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 17 30 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 7 14 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	3 10.0-19.9%below
Age and Service		209 Posted in "Tons"	30 Tons
27 Yr Built	1950 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	19 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	Y 24 10/08/2019
47 Total Horizontal Clearance	24.3 Ft.	Underwater	N
48 Length of Max Span	53 Ft.	Other Special	N
49 Structure Length	55.12 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	24.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-105-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,356	85	1,156	15	200	0	0	0	0
1150/1:Check/Shake	sq.ft	200	0	0	100	200	0	0	0	0
Notes:Check/Shake to Timber Deck Planks. See Photo. - 10/8/2019										
113/2:Steel Stringer	ft	771	0	0	0	0	39	300	61	471
1000/2:Corrosion	ft	771	0	0	0	0	39	300	61	471
Notes:Rusting to steel members. - 10/8/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Loss of coating causing no effectiveness. - 10/8/2019										
120/2:Steel Truss	ft	112	0	0	0	0	95	106	5	6
1000/2:Corrosion	ft	111	0	0	0	0	95	105	5	6
Notes:Rusting to Steel Members. See Photo. - 10/8/2019										
7362/2:Superstructure Traffic Impact	ft	1	0	0	0	0	100	1	0	0
Notes:Impact damage to U2-L2. South Side See Photo. - 10/8/2019										
515/2:Steel Protective Coating	sq.ft	100	20	20	80	80	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	20	20	80	80	0	0	0	0
Notes:Areas showing sings of loss of coating causing limited effectiveness. - 10/8/2019										
152/2:Steel Floor Beam	ft	85	0	0	0	0	100	85	0	0
1000/2:Corrosion	ft	85	0	0	0	0	100	85	0	0
Notes:Rusting to Steel Members. - 10/8/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
206/2:Timber Column	each	15	100	15	0	0	0	0	0	0
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	112	100	112	0	0	0	0	0	0
7357/3:Pack Rust	each	1	0	0	100	1	0	0	0	0
Notes:Pack Rust to Top one toon Plates of Steel truss. - 10/8/2019										
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Rip Rap Displaced along West Abutment. - 10/8/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [NBI Remarks: Minor rusting of lower truss members and stringers. Minor ice damage to the E-E sections between U2-L3-U2'. L2- U3-L2' north side of structure. 12/04/2012 - Under contract in 2012 county replaced the east abutment piles and cap, placed metal collars on all piles and repaired the E-E section south side from U1 to L2'. Riprap placed along west abutment. Structure Posted to 30 Tons both sides. New signs in Placed. Previous Posting 15 Tons. No additional equipment used for access of Fracture Critical Inspection. - 10/8/2019

Alert Code 1: Ice damage to D-D sections both sides. Pack rust evident on upper truss splice plated and along C-C section. Two (2) rivets missing C-C section @ U2' right side. replaced with Bolts. - 10/8/2019

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SEC 409

Structure Number: 18-105-02.0

Alert Code 2: Ice damage to D-D sections both sides. Pack rust evident on upper truss splice plated and along C-C section. Two (2) rivets missing C-C section @ U2' right side. One rivet missing on splice plate D-D to floor beam No. 3 - South side. All floor beams sagging up to 1". Vehicle damage to truss between U2-L3, U2-L2 and U3-L3 on the south side and L2-U2 north side. - 10/8/2019

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SEC 409

Structure Number: 18-105-02.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ELKMOUNT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SO BRANCH FOREST RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	7 WEST 2 NORTH INKSTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 09' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 47' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	589287.6 5335429.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 30 54 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 33 Tons
208 Dk Overburden	24 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1960 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	September 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	34 Ft.	Other Special	N
49 Structure Length	37.07 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/20/2018
	27.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 18-105-02.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	328	100	328	0	0	0	0	0	0
206/2:Timber Column	each	16	100	16	0	0	0	0	0	0
216/2:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Some channel bank erosion upstream & downstream. Tree growth near structure north side.
9/2017 - Beaver dams on both sides of structure. - 9/23/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-105-02.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ELKMOUNT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect SO. BRANCH FOREST RIVER		102 Direction of Traffic	2 2-way traffic
09 Location	7 WEST 1 NORTH INKSTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 10' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 47' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	589568.1 5335544.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 31 56 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 34 Tons
208 Dk Overburden	3 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1968 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	58 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/20/2018
	26.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-105-02.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	522	99	519	1	3	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Spall underside of East Beam over North Bank. See Photo. - 9/6/2019										
1100/1:Exposed Prestressing	ft	1	0	0	100	1	0	0	0	0
Notes:Exposed Tendon East Outside Beam near South Abutment. See Photo. - 9/6/2019										
1110/1:Cracking (PSC)	ft	10	100	10	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	56	59	33	36	20	5	3	0	0
1080/2:Delamination/Spall/Patched Area	ft	3	0	0	0	0	100	3	0	0
Notes:Spalling to SE Corner of South Abutment with +3" of section loss. - 9/6/2019										
1130/2:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
Notes:Vertical Cracking to South Abutment. See Photo. - 9/6/2019										
330/1:Metal Bridge Railing	ft	121	100	121	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	121	98	118	1	1	2	2	0	0
1090/1:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:Spalling with exposed rebar to SE order of Curb. - 9/6/2019										
7000/1:Damage	ft	2	0	0	0	0	100	2	0	0
Notes:Movement of Concrete Curb Sections. East side. - 9/6/2019										
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor rotting of rail posts. Spalling of concrete at bridge seat area, SE corner, with up to 3" section loss under beam. Horizontal cold joint, south abutment. Logitudinal hairline crack midspan underside west outside beam. Some superficial cracking in both outside beams. South channel bank erosion upstream. 9/2015 - Spalling with exposed tendon east outside beam near south abutment. - 9/6/2019

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Structure Number: 18-105-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	PLYMOUTH TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 1 NORTH ORR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 06' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 47' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	589666.5 5328816.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 28 50 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 30 Tons
208 Dk Overburden	23 Gravel/Dir	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1962 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	September 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.9 Ft.	Underwater	N
48 Length of Max Span	34 Ft.	Other Special	N
49 Structure Length	37.07 Ft.	218 Channel Profile	1 48 05/18/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/20/2018
	27.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-105-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	331	100	331	0	0	0	0	0	0
206/2:Timber Column	each	14	100	14	0	0	0	0	0	0
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Spillway east of structure approx. 500 ft. Minor crack in one guardrail post - east side. SW Railing Posts repacked. See Photo. - 9/6/2019

Alert Code 1: 9/2017 - Beaver dam under structure blocking flow through channel. - 9/6/2019

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SEC 409

Structure Number: 18-105-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	83.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	PLYMOUTH TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect NO. BRANCH TURTLE RIVER		102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 2 NORTH NIAGARA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 02' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 47' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	589773.1 5321612.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 40 73 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	215 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1940 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	November 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.6 Ft.	Underwater	N
48 Length of Max Span	20 Ft.	Other Special	N
49 Structure Length	21.98 Ft.	218 Channel Profile	1 48 05/18/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	24.6 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	26.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 18-105-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	538	100	538	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	180	0	0	0	0	100	180	0	0
1000/2:Corrosion	ft	180	0	0	0	0	100	180	0	0
Notes:Rusting to all Girders. See photo. - 11/4/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	25	25	75	75
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	25	25	75	75
Notes:Various areas with rusting due to loss of coating. No Effectiveness. - 11/4/2019										
110/2:Re Conc Opn Girder/Beam	ft	39	100	39	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	52	62	32	15	8	23	12	0	0
1080/3:Delamination/Spall/Patched Area	ft	15	0	0	20	3	80	12	0	0
Notes:Spalling to Bridge Seat of North abutment. Minor spalling to bridge seat of South Abutment. See Photo. - 11/4/2019										
1130/3:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
Notes:Vertical Cracking to both Abutments. See Photo. - 11/4/2019										
331/1:Re Conc Bridge Railing	ft	43	100	43	0	0	0	0	0	0
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Slope Protection displaced along North Abutment. - 11/4/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor horizontal and vertical roadway alignment. Cracking and spalling along bridge seat and at corners north abutment. Channel runs along north abutment exposing footing. Paint failing with rusting to all girders. Tree growth in channel. Erosion behind NW wing. 10/2017 - Some spalling under girders and slope protection failing at north abutment. Tree Growth near Structure at NE and SE Wings. - 11/4/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-105-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	MORaine TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE GOOSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	9 WEST 1 SOUTH LARIMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 53' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 48' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	588773.7 5304716.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 39 70 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 23 42 Tons
208 Dk Overburden	21 Gravel/Dir	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2000 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	September 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	41.01 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.5 Ft.	212 Structure Load Rated	03/20/2018
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-105-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	322	100	322	0	0	0	0	0	0
206/3:Timber Column	each	16	81	13	13	2	6	1	0	0
1140/3:Decay/Section Loss	each	1	0	0	0	0	100	1	0	0
Notes:minor crushing pile #2 west abutment. - 9/4/2019										
1900/3:Distortion	each	2	0	0	100	2	0	0	0	0
Notes:both outside piles at west abutment only sitting on approximately 30-40% of the cap - 9/4/2019										
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	62	100	62	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	85	100	85	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	50	1	50	1	0	0
4000/3:Settlement	each	2	0	0	50	1	50	1	0	0
Notes:Both slop protections settled and displaced. - 9/4/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curbs. Old concrete abutment in channel - south side. East abutment riprap displaced. Poor vertical roadway alignment. West cap @ at the west abutment only setting on 1/2 of the south & north outside piles. Pile #2 from the north west abutment split & crushing with approximately 20% - 30% section loss. 5/2017 - Scour hole under structure 30' x 30' x 3' deep. - 9/4/2019

Alert Code 1: 30' x 30' x 3' deep scour hole under structure.South end of cap at the west abutment only setting on 1/2 of the south & north outside piles. Pile #2 from the north west abutment split & crushing with approximately 20% - 30% section loss. - 9/4/2019

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SEC 409

Structure Number: 18-105-22.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	MORAIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01803 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE GOOSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	9 WEST 2 SOUTH LARIMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	15.596	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 52' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 48' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	589365.5 5303114.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 38 69 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 41 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2000 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	September 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	41.01 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.5 Ft.	212 Structure Load Rated	03/20/2018
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-105-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	322	100	322	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	69	88	61	12	8	0	0	0	0
1130/1:Cracking (RC and Other)	ft	8	0	0	100	8	0	0	0	0
Notes:minor diagonal cracking both abutments. - 9/4/2019										
330/1:Metal Bridge Railing	ft	85	100	85	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor diagonal cracking at wing corners and both abutments. Heavy vegetation in channel both sides. - 9/4/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-105-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	40.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	OGAN CENTER TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	10 WEST 4 NORTH NORTHWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 48' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 47' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	590129.7 5294938.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 13 24 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 8 15 Tons
208 Dk Overburden	1 None	70 Bridge Posting	1 30.0-39.9%below
Age and Service		209 Posted in "Tons"	24 Tons
27 Yr Built	1962 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	November 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.3 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/16/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	212 Structure Load Rated	03/20/2018
52 Deck Width	25.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-105-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	635	92	585	8	50	0	0	0	0
1180/1:Abrasion	sq.ft	50	0	0	100	50	0	0	0	0
Notes:Minor wear to deck planks. - 11/4/2019										
107/2:Steel Opn Girder/Beam	ft	171	0	0	100	171	0	0	0	0
1000/2:Corrosion	ft	171	0	0	100	171	0	0	0	0
Notes:Rusting to all Girders. - 11/4/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of Effectiveness. - 11/4/2019										
111/2:Timber Open Girder	ft	220	50	110	50	110	0	0	0	0
1140/2:Decay/Section Loss	ft	110	0	0	100	110	0	0	0	0
Notes:Minor decay to Timber Girders near West End. - 11/4/2019										
206/3:Timber Column	each	14	50	7	21	3	0	0	29	4
1140/3:Decay/Section Loss	each	2	0	0	50	1	0	0	50	1
Notes:Pile 2 South Abutment decay/section loss through column. See Photo. - 11/4/2019										
1160/3:Crack (Timber)	each	2	0	0	100	2	0	0	0	0
Notes:Two timber piles cracked south Abutment. - 11/4/2019										
1900/3:Distortion	each	3	0	0	0	0	0	0	100	3
Notes:Piles leaning inward away from Timber cap at South Abutment. - 11/4/2019										
216/3:Timber Abutment	ft	66	50	33	0	0	0	0	50	33
1900/3:Distortion	ft	33	0	0	0	0	0	0	100	33
Notes:Top Back planks tilting back causing abutment to til back away from Timber Piles. See Photo. - 11/4/2019										
235/2:Timber Pier Cap	ft	66	47	31	3	2	0	0	50	33
1160/2:Crack (Timber)	ft	2	0	0	100	2	0	0	0	0
Notes:Minor cracking to North Timber Cap. - 11/4/2019										
1900/2:Distortion	ft	33	0	0	0	0	0	0	100	33
Notes:South Abutment Cap tilting back causing loss of bearing to all piles. See Photo and Alert Code 2. - 11/4/2019										
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
4000/1:Settlement	each	0	0	0	0	0	0	0	0	0
Notes:Settlement of South Abutment causing cap to tilt back. See Photo. - 11/4/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor vertical roadway alignment. Some minor rotting of piling. Channel bank erosion - downstream side along North Bank. - 11/4/2019

Alert Code 2: Top 2 backwall planks at the south abutment tilting away. Both abutment caps tilting away, allowing only 30% - 50% bearing on all piles. 10/2015 - Pile 3 south abutment supporting 25% of the cap. Pile 2 south abutment rotted thru near bottom. Appears to be additional settlement of the south abutment and the south abutment cap tilting away. - 11/4/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-106-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	77.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	PLYMOUTH TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST ORR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 05' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 46' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	591298.7 5327422.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 14 26 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 10 20 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	2 20.0-29.9%below
Age and Service		209 Posted in "Tons"	25 Tons
27 Yr Built	1950 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 29, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.9 Ft.	Underwater	N
48 Length of Max Span	15 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	1 48 05/18/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.2 Ft.	212 Structure Load Rated	03/20/2018
52 Deck Width	28.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-106-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	980	100	980	0	0	0	0	0	0
111/2:Timber Open Girder	ft	1,001	90	901	10	100	0	0	0	0
1150/2:Check/Shake	ft	100	0	0	100	100	0	0	0	0
Notes:minor checking to lower portions of timber girders. - 10/29/2019										
206/3:Timber Column	each	20	70	14	30	6	0	0	0	0
1140/3:Decay/Section Loss	each	6	0	0	100	6	0	0	0	0
Notes:Decay near waterline to Timber Pier Piling. - 10/29/2019										
216/2:Timber Abutment	ft	56	54	30	36	20	11	6	0	0
1130/2:Cracking (RC and Other)	ft	6	0	0	0	0	100	6	0	0
Notes:Cracking to North Abutment. - 10/29/2019										
1150/2:Check/Shake	ft	20	0	0	100	20	0	0	0	0
Notes:Check to timber planks near water line North Abutment. - 10/29/2019										
235/2:Timber Pier Cap	ft	85	44	37	57	48	0	0	0	0
1170/2:Split/Delamination (Timber)	ft	48	0	0	100	48	0	0	0	0
Notes:Split to North Timber Cap. Throughout length. - 10/29/2019										
330/1:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
Notes:Rotting of Wing Piling. - 10/29/2019										
1140/2:Decay/Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Rotting of Wing Piling. - 10/29/2019										

Remarks: NBI Remarks: Minor rotting of wing piling. Some cracking near center of north abutment cap also west end of pier cap. Some rotting of pier piling. Structure Posted at 25 Tons both sides. - 10/29/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-106-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	PLYMOUTH TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 5 SOUTH INKSTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 05' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 46' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	591328.6 5326300.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	99 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	49 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1989 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 06, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.2 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 05/18/2017
49 Structure Length	25.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	12/27/2007
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-106-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	180	99	179	1	1	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Spall to East Outside beam. See Photo. - 9/6/2019										
206/2:Timber Column	each	16	100	16	0	0	0	0	0	0
216/2:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	52	100	52	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: NW wing replaced due to fire damage. Minor spall area east outside beam. Heavy Vegetation in Channel, both sides. See Photos. - 9/6/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-106-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	OGAN CENTER TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 WEST 4 NORTH NORTHWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 47' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 46' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	591775.4 5294035.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 34 61 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2004 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	September 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.9 Ft.	Underwater	N
48 Length of Max Span	33 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	1 48 04/30/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.9 Ft.	212 Structure Load Rated	03/20/2018
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-106-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	72	86	62	0	0	14	10	0	0
107/2:Steel Opn Girder/Beam	ft	648	100	648	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
111/2:Timber Open Girder	ft	144	100	144	0	0	0	0	0	0
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	60	100	60	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	68	100	68	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	71	100	71	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	72	86	62	0	0	14	10	0	0
1170/1:Split/Delamination (Timber)	ft	10	0	0	0	0	100	10	0	0
Notes:southwest corner see photo - 9/24/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor vertical and horizontal roadway alignment. Timber curb split southwest corner - see photo. - 9/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-107-07.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	AGNES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01808 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST OF ORR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	6.499	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 05' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 45' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	592087.9 5327416.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Other		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	46 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	33 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	26 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1987 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	70 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	8 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 29, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	30.2 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/18/2017
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	03/20/2018
51 Bridge Rdwy Width - Curb to Curb	30.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	31.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-107-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	904	100	904	0	0	0	0	0	0
156/2:Timber Floor Beam	ft	33	100	33	0	0	0	0	0	0
206/2:Timber Column	each	16	100	16	0	0	0	0	0	0
216/2:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	69	93	64	7	5	0	0	0	0
1150/2:Check/Shake	ft	5	0	0	100	5	0	0	0	0
Notes:Minor check/shake to East Abutment Cap near SE Corner. - 10/29/2019										
330/1:Metal Bridge Railing	ft	59	100	59	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	59	80	47	20	12	0	0	0	0
1170/1:Split/Delamination (Timber)	ft	12	0	0	100	12	0	0	0	0
Notes:Split to top of Timber Curb to SE section. See Photo. - 10/29/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor channel alignment to the north. - 10/29/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-107-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	AGNES TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	5 SOUTH 5 WEST INKSTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 04' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 45' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	592466.3 5325812.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 25 46 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 15 28 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	35 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 25, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	30.2 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 05/18/2017
49 Structure Length	32.15 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	30.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	31.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 18-107-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/2:Timber Slab	sq.ft	969	100	969	0	0	0	0	0	0
156/2:Timber Floor Beam	ft	33	100	33	0	0	0	0	0	0
206/2:Timber Column	each	16	94	15	6	1	0	0	0	0
1170/2:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes:Pile 6 West Abutment split along North portion. See Photo. - 11/25/2019										
216/2:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	69	100	69	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	66	100	66	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	66	100	66	0	0	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/1:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Slope Protection along East and West Abutment settled and displaced. - 11/25/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Some minor rotting lower portion of abutment piles below water line. 9/2015 - Minor crack middle portion of column #6 west abutment. Both slope protections settled and displaced. Inspection incomplete due to High Water. See Photo. 10/29/2019. Inspection completed 11/25/2019. - 11/25/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-107-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	AGNES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 2 SOUTH ORR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 04' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 45' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	592946.7 5324899.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	6 Bituminous	64 Oper. Rating	HS 38 68 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 22 41 Tons
208 Dk Overburden	35 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1954 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	34 Ft.	Other Special	N
49 Structure Length	37.07 Ft.	218 Channel Profile	1 48 05/18/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	212 Structure Load Rated	03/22/2018
52 Deck Width	25.6 Ft.	213 Federal Aid Project Number	CS-713(27)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-107-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	883	100	883	0	0	0	0	0	0
110/2:Re Conc Opn Girder/Beam	ft	331	100	331	0	0	0	0	0	0
206/3:Timber Column	each	14	93	13	0	0	7	1	0	0
1170/3:Split/Delamination (Timber)	each	1	0	0	0	0	100	1	0	0
Notes:Pile #3 South Abutment split at top and open 1 1/2". See Photo. - 9/6/2019										
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	75	100	75	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	75	100	75	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Third pile from the west on the south abutment split and open 1 1/2". Old piling in the channel.
Top wing planks cracked - both south wings. 9/2015 - Channel bank erosion near the ends at both south wings.
Wood Spacer Block missing second post from the north, east railing. - 9/6/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-107-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	AGNES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 2 NORTH MCCANNA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 02' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 45' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	593014.3 5321244.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	6 Bituminous	64 Oper. Rating	HS 31 56 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 18 34 Tons
208 Dk Overburden	35 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1954 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	34 Ft.	Other Special	N
49 Structure Length	37.07 Ft.	218 Channel Profile	1 48 05/18/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/22/2018
	24.0 Ft.	213 Federal Aid Project Number	CS-713(2)
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-107-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	893	100	893	0	0	0	0	0	0
110/2:Re Conc Opn Girder/Beam	ft	331	100	331	0	0	0	0	0	0
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	75	100	75	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	75	97	73	3	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Spalling to NE Corner of Curb. See Photo. - 9/6/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Hairline cracks in beams at 1 ft spacing starting 10 ft from abutments. Top plank NE wing cracked. Posted 40 MPH thru structure. HBP overlay in 2015. - 9/6/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-107-13.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	NIAGARA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 1 NORTH MCCANNA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 45' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	592971.2 5318986.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	6 Bituminous	64 Oper. Rating	HS 32 58 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	34 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1954 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	140 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	34 Ft.	Other Special	N
49 Structure Length	37.07 Ft.	218 Channel Profile	1 48 05/18/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/22/2018
	24.0 Ft.	213 Federal Aid Project Number	CS-713(2)
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 18-107-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	883	100	883	0	0	0	0	0	0
110/2:Re Conc Opn Girder/Beam	ft	331	99	327	1	4	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes:Spalling to East Outside Beam towards the South end. See Photo. - 9/6/2019										
206/2:Timber Column	each	14	100	14	0	0	0	0	0	0
216/2:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	75	100	75	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	75	97	73	0	0	3	2	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
Notes:Spalling to NE Corner of Curb. See Photo. - 9/6/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Spalling of curb northeast corner. 9/2015 - HBP overlay on deck in 2015. Minor spalling to east end channel beam. Heavy Vegetation in channel both sides. - 9/6/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-107-13.2

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	NIAGARA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01814 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST OF MCCANNA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.099	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 00' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 45' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	592695.2 5317688.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 55 99 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 28 52 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	36 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	210 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	16.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 06, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	30.2 Ft.	Other Special	N
48 Length of Max Span	20 Ft.	218 Channel Profile	1 48 05/18/2017
49 Structure Length	21.98 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	12/15/1992
51 Bridge Rdwy Width - Curb to Curb	30.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	33.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-107-13.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	667	100	667	0	0	0	0	0	0
110/2:Re Conc Opn Girder/Beam	ft	157	100	157	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	92	61	8	5	0	0	0	0
1090/2:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
Notes:Spalling with exposed rebar to upper portion of NE Corner of East Abutment. See Photo. - 9/6/2019										
1130/2:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
Notes:Vertical Cracks to East Abutment. - 9/6/2019										
331/1:Re Conc Bridge Railing	ft	43	98	42	2	1	0	0	0	0
1090/1:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:NW Corner Post spalled with exposed rebar. See Photo. - 9/6/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor cracks in abutments at widenings. Top Portion of West abutment SW Corner of footing exposed. Sediment & vegetation buildup in channel both sides. - 9/6/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-107-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	OGAN CENTER TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE GOOSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	7 WEST 1 NORTH KEMPTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 49' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 46' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	591699.2 5298320.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 52 94 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 30 55 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2000 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	September 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	41.01 Ft.	218 Channel Profile	1 48 05/16/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	29.5 Ft.	212 Structure Load Rated	03/22/2018
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-107-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	322	100	322	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	72	100	72	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	85	100	85	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor vertical roadway alignment. - 9/4/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-107-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GRACE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE GOOSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 1 NORTH KEMPTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 49' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 45' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	593309.6 5297598.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 36 65 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 21 39 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1997 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	35 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 24, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.2 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/16/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.3 Ft Lt-Side	212 Structure Load Rated	07/07/2017
51 Bridge Rdwy Width - Curb to Curb	27.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-107-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/2:Timber Deck	sq.ft	4	100	4	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	394	100	394	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	50	50	50	50	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	50	50	50	50	0	0	0	0
111/2:Timber Open Girder	ft	121	100	121	0	0	0	0	0	0
206/2:Timber Column	each	14	100	14	0	0	0	0	0	0
216/2:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	49	86	42	0	0	14	7	0	0
1170/1:Split/Delamination (Timber)	ft	7	0	0	0	0	100	7	0	0
Notes:Split timber curb southwest corner. - 9/24/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor horizontal roadway alignment. 5/2017 - Scour hole under structure 80' x 20' x 3' deep.
Splitting timber curb southwest corner. - 9/24/2019

Alert Code 1: Scour hole under structure 80' x 20' x 3' deep. - 9/24/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-107-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	OGAN CENTER TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 8 WEST NORTHWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 47' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 46' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	592702.2 5293498.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 26 47 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2006 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	September 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.5 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	45.93 Ft.	218 Channel Profile	1 48 05/16/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	09/19/2006
	31.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-107-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	368	100	368	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	76	100	76	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	102	100	102	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-107-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	87.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	OGAN CENTER TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 WEST 3 NORTH NORTHWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 46' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 45' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	593308.9 5292536.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 29 53 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 17 32 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1951 106 Yr Reconstructed	2000	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	7 Above Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	5 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	-1.00	71 Waterway Adequacy	8 Equal Desirable
19 Bypass, Detour Length	124 Miles	72 App. Rdwy. Alignment	4 Minimum Tolerable
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	17 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	October 29, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	25.6 Ft.	Fracture Critical	N
48 Length of Max Span	24 Ft.	Underwater	N
49 Structure Length	26.90 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	218 Channel Profile	1 48 05/16/2017
	0.3 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb		207 Transporter Erector Routes and Sites	-1
	24.9 Ft.	212 Structure Load Rated	07/10/2017
52 Deck Width	25.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-107-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	646	100	646	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	312	74	231	26	81	0	0	0	0
1000/2:Corrosion	ft	81	0	0	100	81	0	0	0	0
Notes:Rusting to various Steel Girders. - 10/29/2019										
515/2:Steel Protective Coating	sq.ft	100	95	95	5	5	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	95	95	5	5	0	0	0	0
Notes:Areas showing loss of effectiveness of coating. - 10/29/2019										
111/2:Timber Open Girder	ft	79	100	79	0	0	0	0	0	0
206/3:Timber Column	each	12	83	10	17	2	0	0	0	0
1900/3:Distortion	each	2	0	0	100	2	0	0	0	0
Notes:Piles 1 & 2 west abutment only supporting 60% - 70% of the cap @ the NW corner. - 10/29/2019										
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	52	100	52	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor horizontal roadway alignment. Both pile in northeast wing broken. Minor pitting to bottom of steel girders. Piles 1 & 2 west abutment only supporting 60% - 70% of the cap @ the NW corner. - 10/29/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-108-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	74.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	INKSTER TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect SO. BRANCH FOREST RIVER		102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 5 WEST INKSTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 11' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 44' 37.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	593378.1 5337911.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 15 28 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 10 19 Tons
208 Dk Overburden	202 Gravel/Dirt	70 Bridge Posting	2 20.0-29.9%below
Age and Service		209 Posted in "Tons"	24 Tons
27 Yr Built	1952 106 Yr Reconstructed	2019	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	5 Above Min Tolerable
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	30 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	2013	71 Waterway Adequacy	7 Above Minimum
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	4 Minimum Tolerable
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	20 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	September 06, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	27.4 Ft.	Fracture Critical	N
48 Length of Max Span	30 Ft.	Underwater	N
49 Structure Length	29.70 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	218 Channel Profile	1 48 05/15/2017
	0.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb		207 Transporter Erector Routes and Sites	
	27.4 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	28.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-108-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
15/2:Pre Concrete Top Flange	sq.ft	896	100	896	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	224	100	224	0	0	0	0	0	0
206/2:Timber Column	each	14	79	11	21	3	0	0	0	0
1170/2:Split/Delamination (Timber)	each	3	0	0	100	3	0	0	0	0
Notes:_										
216/2:Timber Abutment	ft	56	50	28	50	28	0	0	0	0
1140/2:Decay/Section Loss	ft	28	0	0	100	28	0	0	0	0
Notes:_										
235/2:Timber Pier Cap	ft	64	100	64	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	64	100	64	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Bank erosion both banks upstream & downstream. Rotted wing piling. Three split pile open to 3/4" at top at east abutment. Poor horizontal & vertical roadway alignment from the west. 10/2015 - Some rotting and decay on lower portion of east abutment. 2019 - In 2019 County forces reshaped & installed riprap both abutments, new timber caps, quad T-Beam deck. Reinstalled w-beam on angle iron posts. Concrete poured along Southeast corner of slope protection for additional erosion protection.

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SEC 409

Structure Number: 18-108-09.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	55.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	AGNES TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 3 WEST ORR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 03' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 44' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	593458.3 5324216.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 26 48 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 12 23 Tons
208 Dk Overburden	202 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1940 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2013	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 30, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	21.0 Ft.	Underwater	N
48 Length of Max Span	25 Ft.	Other Special	N
49 Structure Length	27.89 Ft.	218 Channel Profile	1 48 05/18/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/29/2016
	21.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	21.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-108-09.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	592	95	562	5	30	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	10	100	10	0	0	0	0	0	0
Notes: _										
1130/1:Cracking (RC and Other)	sq.ft	20	85	17	15	3	0	0	0	0
Notes: _										
107/2:Steel Opn Girder/Beam	ft	249	0	0	28	69	72	180	0	0
1000/2:Corrosion	ft	249	0	0	28	69	72	180	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	75	75	25	25
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	75	75	25	25
Notes: _										
215/3:Re Conc Abutment	ft	43	72	31	14	6	14	6	0	0
1080/3:Delamination/Spall/Patched Area	ft	3	0	0	0	0	100	3	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	3	0	0	0	0	100	3	0	0
Notes: _										
4000/3:Settlement	each	1	0	0	0	0	100	1	0	0
7362/2:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 9/7/2007 - East abutment settled approximately 6" tipping in at top. NBI Remarks: No curb or railing. Rusty girders. Impact damage to bottom flange with 10" crack in flange in 5th girder from the north. See photo. No lean measurements in 2009, 2011 or 2013 due to high water.

Alert Code 1: All girders are sagging 1 - 2".

Alert Code 2: East abutment settled approximately 6". East abutment leans in 7" in 4' northeast corner, 7" in 4' southeast corner a change from 6" previous inspection. West abutment leans in 3" in 4' northwest corner and 3" in 4' southwest corner. Girders not resting on inside of east abutment due to settlement and rotation. West abutment moved in 2 - 4" at the top. East abutment moved in 12 - 14" at the top. 10/2017 - No lean measurements due to high water. Beaver dam downstream restricting flow.

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Structure Number: 18-108-10.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	AGNES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 3 SOUTH OF ORR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 03' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 43' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	594593.9 5322780.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 45 82 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 46 Tons
208 Dk Overburden	23 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	September 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	50.85 Ft.	218 Channel Profile	1 48 05/18/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	212 Structure Load Rated	03/22/2018
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Structure Number: 18-108-10.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	354	100	354	0	0	0	0	0	0
206/2:Timber Column	each	18	100	18	0	0	0	0	0	0
216/2:Timber Abutment	ft	62	100	62	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	62	100	62	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	102	100	102	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 9/2015 - Channel bank erosion upstream. Old Piling in Channel next to South Slope Protection. See Photo. -
9/6/2019

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SEC 409

Structure Number: 18-108-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ELM GROVE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST 5 NORTH LARIMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 57' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 43' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	594679.8 5313238.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1948 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	4 Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	19 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	18.7 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 8'X4'X24' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 18-108-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	72	75	54	25	18	0	0	0	0
1130/2:Cracking (RC and Other)	ft	12	100	12	0	0	0	0	0	0
Notes:Minor vertical cracking to all walls of Culvert. - 10/8/2019										
1190/2:Abrasion(PSC/RC)	ft	18	0	0	100	18	0	0	0	0
Notes:Concrete Surface Wear to Culvert Floor. No Photo taken due to water level. - 10/8/2019										
8398/3:Slope Protection	each	1	0	0	0	0	0	0	100	1
4000/3:Settlement	each	1	0	0	0	0	0	0	100	1
Notes:Rip Rap Displaced West End. No Photo due to water level. - 10/8/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor channel alignment. Cracking on headwalls with some spalling with 2" of section loss to portion of the west end headwall.. Sediment buildup in north barrel up to 1'. Some spalling with section loss to west end both center walls. 10/2015 - Riprap displaced at west end. - 10/8/2019

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Structure Number: 18-109-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	58.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	AGNES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 2 WEST ORR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 02' 60.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 43' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	594952.1 5322628.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 35 64 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 21 39 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1959 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	3 Intolerable - Correct
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	November 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.4 Ft.	Underwater	N
48 Length of Max Span	32 Ft.	Other Special	N
49 Structure Length	37.07 Ft.	218 Channel Profile	1 48 05/18/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	17.4 Ft.	212 Structure Load Rated	08/29/2016
52 Deck Width	18.4 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-109-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	646	95	614	5	32	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	32	0	0	100	32	0	0	0	0
Notes:Spalling underside of deck near East Abutment. - 11/25/2019										
107/2:Steel Opn Girder/Beam	ft	381	0	0	50	190	50	191	0	0
Notes:Rusting to all Girders. - 11/25/2019										
1000/2:Corrosion	ft	381	0	0	50	190	50	191	0	0
Notes:Rusting to all Girders. See Photo. - 11/25/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	50	50	30	30	20	20
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	50	50	30	30	20	20
Notes:Inspection incomplete due to High Water. See Photo. 10/29/2019. - 11/25/2019										
215/3:Re Conc Abutment	ft	36	0	0	50	18	50	18	0	0
1080/3:Delamination/Spall/Patched Area	ft	12	0	0	0	0	100	12	0	0
Notes:Spalling under beams west abutment. See photo. - 11/25/2019										
1090/3:Exposed Rebar	ft	6	0	0	0	0	100	6	0	0
Notes:Spalling with exposed rebar underside of Girders and along water line. - 11/25/2019										
4000/3:Settlement	ft	18	0	0	100	18	0	0	0	0
Notes:Outward movement at top and inward movement at bottom causing lean to East abutment. See Alert Code 2 for measurements. - 11/25/2019										
330/1:Metal Bridge Railing	ft	72	0	0	0	0	78	56	22	16
7000/1:Damage	ft	72	0	0	0	0	78	56	22	16
Notes:Damage to Both Railings. See Photo. - 11/25/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No coating. Loss of Effectiveness. - 11/25/2019										
331/1:Re Conc Bridge Railing	ft	72	83	60	17	12	0	0	0	0
1190/1:Abrasion(PSC/RC)	ft	12	0	0	100	12	0	0	0	0
Notes:Wear to both curbs with exposed aggregates. - 11/25/2019										
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Scour hole under structure undermining both footings 3' x 18' x 35'. - 11/25/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/14/2005 - East abutment leans approx. 1 1/4" at the top. Spots with section loss to abutment up to 6" - see photo. NBI Remarks: Poor channel alignment. Spalling where wings meet backwalls except the NE corner. Large spall-2'x3' in the east abutment. Vehicle damage to both railings. Embankment erosion around both east wings. Spalling under beams west abutment. 10/2015 - Metal bridge railing not connected to the SW corner. 5/2017 - Scour hole under structure undermining both footings 18' x 35' x 3' deep. Inspection incomplete due to High Water. See Photo. 10/29/2019. Inspection completed 11/25/2019. - 11/25/2019

Alert Code 1: Section loss to lower portion of east abutment at water line of up to 3". Concrete deterioration at southwest corner of west abutment at water line and below with visible section loss to 2". 10/2017 - Large beaver dam 200' upstream restricting flow.. - 11/25/2019

Alert Code 2: Scour hole under structure undermining both footings 3' x 18' x 35'. Scour is 2' below top of abutment footings. West abutment moving inward 7"-east abutment moving inward 6" at the northeast corner and outward 4" at the southeast corner. East abutment leans in 3" in 4' south side, 1" in 4' north side. No change in lean in 2011,2013 2015, or 2017, and 2019. No change in inward movement. Deck separating from South outside Girder. See Photo. - 11/25/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-109-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GRACE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST OF KEMPTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 49' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 42' 40.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	596488.7 5296769.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1975 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2013	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 05, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10'X12'X38' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-109-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	75	27	20	67	50	7	5	0	0
1090/3:Exposed Rebar	ft	5	0	0	0	0	100	5	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	40	50	20	50	20	0	0	0	0
Notes: _										
1190/3:Abrasion(PSC/RC)	ft	30	0	0	100	30	0	0	0	0
Notes: _										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: NBI Remarks: Diagonal cracking in all wings & wing corners. Vertical cracks in walls and parapets. Seepage in roof, parapets and wing corners. Riprap added to wing corners in 2000. Spalling to walls in both barrels. Embankment erosion behind both east wings. Some honeycombing & exposed rebar east side center wall. Some section loss up to 1". Concrete deterioration south end parapet & outer walls top of SW wing.

Alert Code 1: Scour hole just off north end of west barrel approximately 1.5" deep.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-109-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	55.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GRACE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST OF KEMPTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 48' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 42' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	596601.6 5296629.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	3 Excessive Damage
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1975 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	15 Ft.	Other Special	N
49 Structure Length	35.10 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 15'X8'X54' STEEL PIPE WITH CONCRI		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 18-109-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	108	0	0	0	0	100	108	0	0
1900/3:Distortion	ft	108	0	0	0	0	100	108	0	0
Notes:Approximately 1.7' of distortion to the upper portion of the south pipe and 1.25' upper portion north pipe - see photo. - 10/9/2019										
515/3:Steel Protective Coating	sq.ft	100	70	70	0	0	30	30	0	0
Notes:Minor rusting lower portion of both pipes. - 10/9/2019										
3440/3:Eff (Stl Protect Coat)	sq.ft	100	70	70	0	0	30	30	0	0
4000/3:Settlement	each	1	0	0	0	0	100	1	0	0
Notes:Sag and distortion to upper portion of both pipes. - 10/9/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/3:Headwalls	each	2	0	0	100	2	0	0	0	0
7000/3:Damage	each	2	0	0	100	2	0	0	0	0
Notes:Spalling, cracking from ice impact and movement to the west headwall, spalling w/ minor cracking to the east headwall. - 10/9/2019										

Remarks: 12/23/2005 - Impact damage to west headwall. See photo. Both pipes sagged 1.3' to 1.7' estimated. See photo.
 NBI Remarks: Severe vertical cracks in both headwalls w spalling to both headwalls and minor cracking in east headwall. Heaving in bottom of floor south pipe. Channel bank erosion west side of structure. Horizontal measurements in 2010 & 2013 indicate little or no movement. - 10/9/2019

Alert Code 1: Silt buildup in south barrel, channel flows thru the north barrel. - 10/9/2019

Alert Code 2: Severe sag in roof of both pipes, south pipe approximately 1.7 ft. And north pipe approximately 1.25'. - 10/9/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-109-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	70.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LIND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 3 SOUTH NORTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 42' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	596761.6 5282564.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 34 61 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 37 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	75 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 04, 2019
32 Approach Roadway Width	23 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	25.6 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 05/16/2017
49 Structure Length	40.03 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	03/22/2018
51 Bridge Rdwy Width - Curb to Curb	25.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-109-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	341	100	341	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	52	81	42	19	10	0	0	0	0
1130/2:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:Cracking to North Abutment and South Abutment. - 11/4/2019										
330/1:Metal Bridge Railing	ft	79	100	79	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	79	100	79	0	0	0	0	0	0
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Inward movement to South Abutment with lean at both corners. See Alert Code 2 and Photo. - 11/4/2019										
8398/1:Slope Protection	each	2	50	1	0	0	0	0	50	1
4000/1:Settlement	each	1	0	0	0	0	0	0	100	1
Notes:Displacement of Slope Protection along South Abutment. - 11/4/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/19/2005 - Lean measurements at West end south abutment 1.25" East end South abutment 1.75".
 12/20/2007 - Lean increased on south abutment east end to 2 inches in 4 ft. 01/04/2010 - No change in lean both abutments. [] NBI Remarks: Minor vertical cracks in both abutments. Minor horizontal crack in north abutment. Riprap along southeast half of south abutment washed out exposing footing. One broken end post and one missing end post at southwest corner of structure. One diagonal crack in south abutment open to 1/8". No change in lean measurements in 2010. 10/2017 - Measurements indicate additional movement. 11/2019 - Measurements indicate additional movement. Erosion along SE Wing. Minor hairline vertical and horizontal cracking to outside West Box Beam. - 11/4/2019

Alert Code 1: Slope protection displaced @ the south abutment. Channel bank erosion downstream. - 11/4/2019

Alert Code 2: 11/2019 - South abutment inward movement of 15 1/2" at SE Corner. C Change from 13 1/2" previous inspection. South Abutment inward movement of 8 1/5" at SW Corner. A change from 7" Previous inspection. Additional Inward Movement Observed. South abutment moving inward 13 1/4" at top southeast corner, a change from 9 3/4" previous inspection and 7" at top southwest corner, no change from previous inspection. 11/2019 - South abutment leans in 2 1/4" in 4' at the southeast corner. A change of 2" previous inspection. Southwest corner leans 1 5/8" in 4'. A Change from 1 1/4" previously. Southwest corner leans 1 1/4" in 4' at the southwest corner. Additional Lean measured to both corners at South Abutment in 2019. North abutment leans in 1" in 4' measured at the northwest corner. No Change to NW Corner. No change in lean measurements in 2011 or 2013. 10/2015 - No change in inward lean or inward movement measurements. - 11/4/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-110-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	INKSTER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SO BRANCH FOREST RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 2 NORTH INKSTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 10' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 42' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	596473.2 5337158.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 22 41 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1989 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	September 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	60 Ft.	Other Special	N
49 Structure Length	63.98 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	212 Structure Load Rated	10/15/2015
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	BRO-18(7)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-110-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,916	100	1,914	0	2	0	0	0	0
1090/1:Exposed Rebar	sq.ft	5	60	3	40	2	0	0	0	0
Notes:Spall area 2' x 6" depth northwest corner of deck with exposed rebar. - 9/6/2019										
104/2:Pre Clsd Box Girder	ft	240	100	240	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	128	100	128	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Posted 30 mph speed zone. Poor vertical roadway alignment from the west. Spall area 2' x 6" depth northwest corner of deck with exposed rebar. 9/2015 - In 2014 county forces placed rip-rap at both abutments and at the SE wing corner channel bank. - 9/6/2019

Alert Code 1: Channel bank erosion downstream. - 9/6/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-110-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	AGNES TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH 1 WEST ORR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 02' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 52.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	597076.6 5321049.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Girder - FB		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 22 40 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 15 28 Tons
208 Dk Overburden	25 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1951 106 Yr Reconstructed	1986	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	6 Equal Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	25 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	-1.00	71 Waterway Adequacy	6 Equal Minimum
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	7 Above Min Criteria
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	16 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	November 25, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	26.9 Ft.	Fracture Critical	N
48 Length of Max Span	20 Ft.	Underwater	N
49 Structure Length	24.93 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	218 Channel Profile	1 48 05/18/2017
	0.3 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb		207 Transporter Erector Routes and Sites	-1
	27.2 Ft.	212 Structure Load Rated	03/22/2018
52 Deck Width	28.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-110-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	678	100	678	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	167	0	0	100	167	0	0	0	0
1000/2:Corrosion	ft	167	0	0	100	167	0	0	0	0
Notes:Minor Rusting and pitting to all Girders. See Photo. - 11/25/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Loss of coating causing no effectiveness. - 11/25/2019										
111/2:Timber Open Girder	ft	249	99	247	1	2	0	0	0	0
1140/2:Decay/Section Loss	ft	2	0	0	100	2	0	0	0	0
Notes:Section loss to lower portion of Timber Girder 2 from the North. See Photo. - 11/25/2019										
206/2:Timber Column	each	14	100	14	0	0	0	0	0	0
216/2:Timber Abutment	ft	49	92	45	8	4	0	0	0	0
1140/2:Decay/Section Loss	ft	4	0	0	100	4	0	0	0	0
Notes:Minor section loss below water line at West Abutment. - 11/25/2019										
235/2:Timber Pier Cap	ft	49	100	49	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	25	1	75	3	0	0	0	0
1140/2:Decay/Section Loss	each	3	0	0	100	3	0	0	0	0
Notes:Decay and rotting of wing piling at NW, SW, and SE Wings. See Photo. - 11/25/2019										

Remarks: NBI Remarks: Some rotting wing pile. Slight sag to abutment caps. Old settled/rotted pile next to new piling at Both Abutments. Inspection incomplete 10-8-2019 due to High Water. Inspection Completed 11/25/2019. - 11/25/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-110-11.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	AGNES TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH 1 WEST ORR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 02' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	597236.6 5321049.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 20 36 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 12 23 Tons
208 Dk Overburden	25 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1951 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	November 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/18/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	10/03/2013
	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 18-110-11.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	581	100	581	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	197	0	0	0	0	100	197	0	0
1000/2:Corrosion	ft	197	0	0	0	0	100	197	0	0
Notes:Rusting to all Girders. See Photo. - 11/25/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Loss of Coating Causing rusting due to no effectiveness. - 11/25/2019										
111/2:Timber Open Girder	ft	371	100	371	0	0	0	0	0	0
206/3:Timber Column	each	10	70	7	20	2	10	1	0	0
1170/3:Split/Delamination (Timber)	each	3	0	0	67	2	33	1	0	0
Notes:Pile 3 in east abutment split and open to 1". Piles 1 & 2 west abutment split at the top and open to 1/2" at Pile 2 and 3/4" Pile 1. See Photo. - 11/25/2019										
216/3:Timber Abutment	ft	49	96	47	0	0	4	2	0	0
1160/3:Crack (Timber)	ft	2	0	0	0	0	100	2	0	0
235/2:Timber Pier Cap	ft	49	100	49	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	49	90	44	10	5	0	0	0	0
7000/1:Damage	ft	5	0	0	100	5	0	0	0	0
Notes:Damage to North Guardrail. - 11/25/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	49	94	46	6	3	0	0	0	0
1170/1:Split/Delamination (Timber)	ft	3	0	0	100	3	0	0	0	0
Notes:Delamination to North Curb. - 11/25/2019										
8398/2:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/2:Settlement	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1140/3:Decay/Section Loss	each	4	0	0	100	4	0	0	0	0
Notes:Top Planks to all Wing Walls deteriorating with section loss and pulling away from wings. See Photo. - 11/25/2019										

Remarks: NBI Remarks: Poor horizontal roadway alignment. Pile 3 in east abutment split and open to 1". Rotting of wing plank and piling. Poor channel alignment. One broken guardrail post northeast corner. One cracked vertical backwall plank cracked in east & west abutment. 10/2015 - Slope protection has settled and displaced. 10/2017 - Piles 1 & 2 west abutment split at the top and open to 1/2" to 3/4". Rusting to all steel girders. Inspection incomplete 10/8/19 due to high water. See Photos. Inspection Completed 11/25/2019. - 11/25/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-110-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	AGNES TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 2 NORTH MCCANNA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	597857.1 5320141.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 20 36 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 14 26 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	33 Tons
27 Yr Built	1953 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	September 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.9 Ft.	Underwater	N
48 Length of Max Span	21 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/18/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/22/2018
	27.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-110-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	678	100	678	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	197	39	77	61	120	0	0	0	0
1000/2:Corrosion	ft	120	0	0	100	120	0	0	0	0
Notes:Some pitting, corrosion to most beams. See photo - 9/23/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	50	50	50	50
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	50	50	50	50
Notes:Pitting, corrosion to some beams. - 9/23/2019										
111/2:Timber Open Girder	ft	269	100	269	0	0	0	0	0	0
206/2:Timber Column	each	14	93	13	7	1	0	0	0	0
1170/2:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes:Pile #1 south abutment split 3/4" at the top down to about 2' - 9/23/2019										
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor vertical and horizontal roadway alignment. Some pitting on bottom flange of steel girders. Some rotting of wing piling. NW wing completely covered with riprap. South abutment timber cap tilting back slightly on west end. Top SW wing plank cracked, top plank NW wing missing. 9/2015 - Heavy vegetation and tree growth in channel. Slope protection placed thru channel. 9/2017 - Pile # 1 south abutment split at the top and open to 3/4" from top down to 2". - 9/23/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-110-13.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 1 NORTH OF MCCANNA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	597824.4 5319428.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 33 61 Tons
208 Dk Overburden	21 Gravel/Dir	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2005 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	8 Desirable Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	September 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.8 Ft.	Underwater	N
48 Length of Max Span	50 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/08/2008
	32.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-110-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	403	100	403	0	0	0	0	0	0
206/3:Timber Column	each	16	94	15	6	1	0	0	0	0
1170/3:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes:third pile from the west split at the top and open to 3/4". - 9/23/2019										
216/3:Timber Abutment	ft	68	100	68	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	72	100	72	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	112	100	112	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Third pile from the west at the north abutment split at the top and open 3/4". Beaver dam just west of structure. 9/2015 - Old pile in the center of channel cut off at waterline. - 9/23/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-110-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ELM GROVE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH MCCANNA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 57' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 42' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	596300.9 5312895.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Slab		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 46 83 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 34 62 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	24 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1919 106 Yr Reconstructed	1985	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT	2019	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.9 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	73.5 Ft.	212 Structure Load Rated	03/27/2018
52 Deck Width	74.5 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-110-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/2:Timber Slab	sq.ft	1,840	100	1,840	0	0	0	0	0	0
206/3:Timber Column	each	50	96	48	4	2	0	0	0	0
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes:Pile 6 North Abutment Split at Top and Open 1/2". See Photo. - 10/8/2019										
216/2:Timber Abutment	ft	151	100	151	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	233	99	231	0	0	1	2	0	0
1180/2:Abrasion	ft	2	0	0	0	0	100	2	0	0
Notes:Wear to SE Corner of South Cap. See Photo. - 10/8/2019										
332/1:Timb Bridge Railing	ft	49	92	45	4	2	4	2	0	0
1140/1:Decay/Section Loss	ft	2	0	0	100	2	0	0	0	0
Notes:Section Loos within east timber curb, See Photo. - 10/8/2019										
1180/1:Abrasion	ft	2	0	0	0	0	100	2	0	0
Notes:Wear to East Timber Curb. See Photo. - 10/8/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railing. Pile #6 @ the north abutment split & open to 1/2". 10/2017 - Channel bank erosion near SE wing. North Backwall top Plank titling back at North Abutment. - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-110-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ELM GROVE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 3 WEST LARIMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 57' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	597924.1 5312122.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 25 46 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 15 28 Tons
208 Dk Overburden	24 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1987 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	September 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.2 Ft.	212 Structure Load Rated	07/10/2017
52 Deck Width	28.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-110-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/2:Timber Deck	sq.ft	710	100	710	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	308	100	308	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
111/2:Timber Open Girder	ft	180	100	180	0	0	0	0	0	0
206/2:Timber Column	each	10	80	8	20	2	0	0	0	0
1170/2:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes:Split Pile #3 South Abutment, #1 North Abutment. Both open 3/4". See Photos. - 9/6/2019										
215/2:Re Conc Abutment	ft	23	100	23	0	0	0	0	0	0
216/2:Timber Abutment	ft	39	100	39	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	69	100	69	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	69	100	69	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	52	94	49	6	3	0	0	0	0
1140/1:Decay/Section Loss	ft	3	0	0	100	3	0	0	0	0
Notes:Section loss to NE Corner of Bridge Railing. - 9/6/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railing. One split pile in each abutment, each open to 3/4" at top, pile #3 south abutment, pile #1 north abutment. Poor channel alignment from the west. Some rotting to tops of wing pile. 9/2015 - Riprap placed through channel. Heavy Vegetation in channel both sides. See Photo. NW Wing is Concrete, all other wings are Timber. - 9/6/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-110-17.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ELM GROVE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 8 Service R 00000	0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 1 EAST MCCANNA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 57' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 597262.2	5312889.0	Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Slab		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating HS 55	99 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating HS 39	71 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden 1	None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built 1919	106 Yr Reconstructed 1985	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT 2	30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	0 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 06, 2019
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.9 Ft.	Other Special	N
48 Length of Max Span	12 Ft.	218 Channel Profile	1 48 05/17/2017
49 Structure Length	28.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.5 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.5 Ft Lt-Side	212 Structure Load Rated	07/05/1990
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 18-110-17.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	732	99	725	1	7	0	0	0	0
1180/1:Abrasion	sq.ft	7	0	0	100	7	0	0	0	0
Notes:Minor wear of Timber Planks to south end of Bridge Deck. - 9/6/2019										
206/3:Timber Column	each	18	89	16	11	2	0	0	0	0
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes:Pile #2 South Abutment SPlit 1" at Top, Pile #3 Center Pier Split at top 1". See Photos. - 9/6/2019										
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	85	100	85	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	56	93	52	0	0	0	0	7	4
7000/1:Damage	ft	4	0	0	0	0	0	0	100	4
Notes:Section loss of 70%-80% to NE Corner. See Photo. - 9/6/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Top Plank missing to SW Wing. - 9/6/2019										

Remarks: NBI Remarks: No railings. Channel cleanout east of structure in 2011. 9/2017 - Damage to NE corner of timber curb. Top back wall plank south abutment tilting away. - 9/6/2019

Alert Code 1: Pile #3 center pier split @ the top & open to 1", pile #2 south abutment split at the top and open to 1". - 9/6/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-110-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ELM GROVE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JUTH BRANCH TURTLE RIVE	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 3 NORTH LARIMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 56' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	597934.8 5310761.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 29 53 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 17 32 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1991 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	45 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 06, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	29.2 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/17/2017
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	07/10/2017
51 Bridge Rdwy Width - Curb to Curb	29.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-110-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	872	100	872	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	541	94	510	4	20	2	11	0	0
1000/2:Corrosion	ft	31	0	0	65	20	36	11	0	0
Notes:Corrosion to Girder 4 from the West with section loss. See Photo. - 9/6/2019										
515/2:Steel Protective Coating	sq.ft	100	95	95	0	0	0	0	5	5
3440/2:Eff (Stl Protect Coat)	sq.ft	100	95	95	0	0	0	0	5	5
Notes:Section Loss caused from loss of effectiveness to the coating system. - 9/6/2019										
111/2:Timber Open Girder	ft	151	100	151	0	0	0	0	0	0
206/2:Timber Column	each	18	100	18	0	0	0	0	0	0
216/2:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	59	100	59	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	59	100	59	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Steel girder #4 from west has bottom flange rusting with some section loss. It was an old girder installed when this structure was rebuilt. Poor horizontal roadway alignment from the south and north. - 9/6/2019

Alert Code 1: Beaver Dam under structure. See Photo. - 9/6/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-110-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LARIMORE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 1 NORTH LARIMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 55' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	597972.2 5308067.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 25 46 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed	2018	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	5 Above Min Tolerable
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	10 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	2013	71 Waterway Adequacy	8 Equal Desirable
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	8 Equal Desirable Crit
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	8 Stable Above Footing
32 Approach Roadway Width	16 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	June 18, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	25.0 Ft.	Fracture Critical	N
48 Length of Max Span	18 Ft.	Underwater	N
49 Structure Length	59.00 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.5 Ft Rt-Side	218 Channel Profile	1 48 05/17/2017
	0.5 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb		207 Transporter Erector Routes and Sites	
	25.0 Ft.	212 Structure Load Rated	09/26/2019
52 Deck Width	26.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Structure Number: 18-110-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/2:Timber Deck	sq.ft	1,508	100	1,508	0	0	0	0	0	0
111/2:Timber Open Girder	ft	177	100	177	0	0	0	0	0	0
113/2:Steel Stringer	ft	700	100	700	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	92	92	8	8	0	0	0	0
3420/2:Peel/Bub/Crack(Stl Protect Co	sq.ft	8	0	0	100	8	0	0	0	0
206/3:Timber Column	each	24	100	24	0	0	0	0	0	0
216/2:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	105	100	105	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	117	100	117	0	0	0	0	0	0

Remarks: 01/25/2019 - Bridge rehabbed in 2018.

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SEC 409

Structure Number: 18-110-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GRACE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE GOOSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST OF KEMPTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 49' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 42' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	596964.8 5296773.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	M 13.5 (H 15) (live load for which structure was designated)
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 24 44 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden N	Not Applicable	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	N Not applicable (NBI)
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	90 30 Year of ADT 2013	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	N N 0 0
19 Bypass, Detour Length	12 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 05, 2017
32 Approach Roadway Width	27 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	26.9 Ft.	Other Special	N
48 Length of Max Span	10 Ft.	218 Channel Profile	0
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
TRIPLE, 10'X12'X38' RCB			

Structure Number: 18-110-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	115	71	82	3	4	23	26	3	3
1080/3:Delamination/Spall/Patched Area	ft	4	0	0	0	0	100	4	0	0
Notes: _										
1090/3:Exposed Rebar	ft	4	0	0	0	0	100	4	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	107	77	82	4	4	17	18	3	3
Notes: _										
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0

Remarks: NBI Remarks: Diagonal cracking in wing corners and wings with minor spalling at the corners-south side only. Steel exposed in southwest wing corner. Vertical cracks in walls and parapet. 25'x16" wings added to the northwest and northeast corners in 2000. Concrete spillway added to north end of structure. Concrete spillway separating & settling @ north end. Some spalling with some section loss near floor both outer walls. 10/2015 - Areas of patched and delaminated concrete south end.

Alert Code 1: 1.5' deep scour hole just off south end & 2.5' deep scour hole just off north end of culvert.

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Structure Number: 18-110-26.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GRACE TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE GOOSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST OF KEMPTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 49' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	597834.4 5296789.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	5 Moderate Damage
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	M 13.5 (H 15) (live load for which structure was designated)
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 24 44 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden N	Not Applicable	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1953 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	N Not applicable (NBI)
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	90 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	N N 1 1
19 Bypass, Detour Length	12 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 20, 2019
32 Approach Roadway Width	25 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	29.9 Ft.	Other Special	N
48 Length of Max Span	10 Ft.	218 Channel Profile	0
49 Structure Length	32.15 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	213 Federal Aid Project Number	S-666(2)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
TRIPLE, 10X10X63' RCB			

Structure Number: 18-110-26.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	190	0	0	100	190	0	0	0	0
4000/3:Settlement	ft	190	0	0	100	190	0	0	0	0
Notes:Joint openings to East and West Construction Joint. SeeAlert Code 1. Inspection incomplete due to High Water. See Photo. 10/28/2019 - 11/20/2019										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1080/3:Delamination/Spall/Patched Area	each	4	0	0	100	4	0	0	0	0
Notes:Spalling to all Wings near Headwalls. See photo. - 11/20/2019										

Remarks: 01/05/2010 - Culvert sagging at center construction joint approximately 2". NBI Remarks: Minor cracking in walls with seepage. Sag at center construction joint approximately 2". No backplates in place. Diagonal cracking with efflorescence NE & NW wings. Inspection incomplete due to High Water. See Photo. 10/28/2019. Inspection completed 11/20/2019. - 11/20/2019

Alert Code 1: Concrete breaking out in wing corners exposing reinforcing steel, worse is in SE, NE & NW corners. Spalling of construction joint center barrel. East const. joint open 2" near the bottom, no change. Embankment filtering through near floor. West const. joint open 1" near the bottom no change embankment filtering through. Estimated sediment buildup of approximately 3'-4' in center barrel and 2" in east barrel. 10/05/2017 - No change in joint opening. 11/2019 - No Change in Joint Openings. - 11/20/2019

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SEC 409

Structure Number: 18-110-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GRACE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST 2 NORTH NORTHWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 46' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	598318.8 5291630.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 28 51 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 13 25 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1993 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	2 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 20, 2019
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/16/2017
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	07/10/2017
51 Bridge Rdwy Width - Curb to Curb	23.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-110-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	743	100	743	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	367	32	119	34	124	34	124	0	0
1000/2:Corrosion	ft	248	0	0	50	124	50	124	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Rusting to various elements of Steel Girders with pitting to underside of bottom flange. See Photo. - 11/20/2019										
515/2:Steel Protective Coating	sq.ft	100	30	30	35	35	35	35	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	30	30	35	35	35	35	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Areas of limited effectiveness of coating to Steel Girders. - 11/20/2019										
111/2:Timber Open Girder	ft	92	87	80	0	0	13	12	0	0
1140/2:Decay/Section Loss	ft	92	87	80	0	0	13	12	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Ice impact damage to west outside timber girder. See Photo. - 11/20/2019										
206/2:Timber Column	each	8	100	8	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	23	65	15	35	8	0	0	0	0
1130/2:Cracking (RC and Other)	ft	23	65	15	35	8	0	0	0	0
Notes:Transverse crack with minor cracking along North Abutment. See Photo. - 11/20/2019										
216/2:Timber Abutment	ft	30	100	30	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	62	100	62	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:South Abutment Slope Protection settled and displaced. - 11/20/2019										
8401/2:Wings	each	2	100	2	0	0	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. - 11/20/2019										

Remarks: NBI Remarks: Poor channel alignment from the west. Ice impact damage to west outside timber girder. No railings. Large tree near NE corner. Riprap displaced @ south abutment. South I-Beam brace bent from ice impact west side. Inspection incomplete due to High Water. See Photo. 10/28/2019. Inspection completed 11/20/2019. - 11/20/2019

Alert Code 1: Some section loss to the bottom flange of beams #3, 4 & 7 from the west with minor pitting to the rest of the steel girders. 10/2017 - Large tree in channel East side. See Photo. - 11/20/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-111-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	66.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	INKSTER TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 2 SOUTH INKSTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 07' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	599301.3 5330837.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 11 21 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 7 14 Tons
208 Dk Overburden	24 Gravel/Dirt	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	19 Tons
27 Yr Built	1949 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.9 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	1 48 05/18/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/23/2018
	26.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-111-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	646	100	646	0	0	0	0	0	0
111/2:Timber Open Girder	ft	292	98	286	0	0	2	6	0	0
1140/2:Decay/Section Loss	ft	6	0	0	0	0	100	6	0	0
Notes:Some rotting to the bottom of girder 11 - 10/24/2019										
206/2:Timber Column	each	10	100	10	0	0	0	0	0	0
216/2:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	49	65	32	0	0	0	0	35	17
1140/1:Decay/Section Loss	ft	10	0	0	0	0	0	0	100	10
Notes:Section loss to West Railing near SW Corner and near NE Corner. See Photo. - 10/24/2019										
7000/1:Damage	ft	7	0	0	0	0	0	0	100	7
Notes:Damage causing missing section to West Timber Curb. - 10/24/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: NBI Remarks: Poor vertical roadway alignment. No railings. Vegetation in channel to the east. Minor ice damage to lower part of beams. Vegetation & riprap under structure restricting opening to approximately 7'. 10/2015 - Some rotting to the bottom of girder 11. Section at timber curb missing at the SW corner. - 10/24/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-111-14.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	ELM GROVE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01814 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 1 SOUTH OF MCCANNA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	7.798	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 59' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	597948.4 5316137.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	210 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	16.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	07/12/2016
	0.0 Ft.	213 Federal Aid Project Number	CNOB-CNOC-1814(054)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
10 x 6 x 52' RCBC			

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-111-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	104	100	104	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 7/12/2016 - Bridge was replaced with a double 10 x 6 x 52' RCBC. Vegetation growth in channel South of Structure. - 10/8/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-111-18.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SO. BRANCH TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 3 NORTH LARIMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 56' 40.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 40' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	599550.0 5310980.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 39 70 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 23 42 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	01 Tons
27 Yr Built	1993 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	212 Structure Load Rated	03/23/2018
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	BRIDGE # 111-18.1
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-111-18.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	279	100	279	0	0	0	0	0	0
206/2:Timber Column	each	18	89	16	11	2	0	0	0	0
1170/2:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes:Pile #4 North Abutment split at top and Pile #5 South Abutment split at top open approx. 1/2" See Photo. - 10/8/2019										
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	79	100	79	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Old piling in channel near west abutment. South channel bank erosion downstream. 09/2015 - Beaver dam under structure. Pile #4 north abutment and pile #5 south abutment split at top under cap. 9/25/2017 - Volunteer tree growth near wings. - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-111-24.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LARIMORE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH 2 WEST LARIMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 50' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 40' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	599743.6 5300026.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 48 86 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 28 52 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2002 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	September 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	30 Ft.	Other Special	N
49 Structure Length	33.14 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/23/2018
	29.5 Ft.	213 Federal Aid Project Number	BR NO 18-111-24.1
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 18-111-24.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	240	100	240	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	60	93	56	7	4	0	0	0	0
1130/1:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:Minor vertical cracks east abutment. - 9/24/2019										
330/1:Metal Bridge Railing	ft	66	100	66	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [] NBI Remarks: Both abutment footings exposed. Vertical cracks in east abutment. - 9/24/2019**Alert Code 1:** Scour hole under structure, 30' x 30' x 3' deep. - 9/24/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-111-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	70.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GRACE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 2 WEST KEMPTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 49' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 60.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	599786.4 5298428.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 37 67 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 40 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1960 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	November 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.9 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	212 Structure Load Rated	08/09/2017
52 Deck Width	25.6 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-111-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	177	92	163	3	5	5	9	0	0
1090/2:Exposed Rebar	ft	14	0	0	36	5	64	9	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Areas of exposed rebar with rusting and minor section loss to underside of various channel beams. See photo. Areas of exposed rebar to various areas underside of Channel Beam. - 11/20/2019										
215/3:Re Conc Abutment	ft	56	0	0	100	56	0	0	0	0
4000/3:Settlement	ft	56	0	0	100	56	0	0	0	0
Notes:Inward movement on top with outward movement at bottom of both abutments causing lean. Vertical and diagonal cracking to both abutments. See photo. Refer to Alert Code 2 for lean measurements. - 11/20/2019										
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	75	75	25	25	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co	sq.ft	25	0	0	100	25	0	0	0	0
Notes:Peeling of coating to West Railing. - 11/20/2019										
331/1:Re Conc Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8398/1:Slope Protection	each	1	0	0	0	0	100	1	0	0
4000/1:Settlement	each	1	0	0	0	0	100	1	0	0
Notes:Rip Rap settled under structure exposing footings and both abutments. See photo. - 11/20/2019										
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
1130/3:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:Diagonal cracking within SW Wing. See Photo. - 11/20/2019										

Remarks: 12/23/2005 - Both abutments leaning in. Lean in 4 feet - South abutment- 3.875" East-2.5", West measured at ends. North abutment 1.5" measured at center. 12/27/2007 - Lean measurements on abutments increase. South abutment E same, W-3" in 4 ft., north abutment center 2 1/8" in 4 ft. South abutment bowing and diagonal cracking. 01/04/2010 - No change in lean. [] NBI Remarks: Diagonal cracking in both abutments open to a max. 1/4". Exposed reinforcing steel in channel reams #6, 7 & 8 from west to east bottom side. Two cmp drain pipes enter channel near the southeast wing- one 36" and one 30"-see photo. Diagonal crack in southwest wing open to 1/4", 2 diagonal cracks in south abutment open to 3/16". Poor channel alignment from the west. Tree Growth along NW Wing. Inspection incomplete due to High Water. See Photo. 10/28/2019. Inspection Completed 11/20/2019. - 11/20/2019

Alert Code 1: Both footings exposed. - 11/20/2019

Alert Code 2: S. abutment leans in 5 1/4" in 4' on the east end & 3 1/2" in 4' on the west end, a change from 4 3/4" in 4' east & no change in west end in 2013. N. abutment leans in 2 1/4" in 4', a change from 2 1/8" in 2010. No change in 2013. S. abutment bows in approximately 3". S. abutment moved in @ top 13" measured @ the SE corner. N. abutment moved in @ top 12 3/4" measured @ the NE corner, a change from 11". Continued inward movement of both abutments in the last 3 inspection cycles. 10/2015 - No additional movement in 2015. 10/2017 - North abutment moving in 13 1/2" at the NE corner a change from 12 3/4" in 2015. South abutment moved in 13 3/4" at the SE corner a change from 13" in 2015. No change in lean measurements in 2017. No Lean Measurements taken in 10/2019 due to high Water. 11/2019 - No Change in Lean to Both Abutments. 10/2019 - NE Corner inward movement at 13 3/4". A change from 13 1/2" in 2017. Additional inward movement observed. 10/2019 - Inward movement at SE Corner at 14". A change from 13 3/4" in 2017. Additional inward movement observed. - 11/20/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-111-27.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	72.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GRACE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 SOUTH 2 WEST LARIMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 48' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	599830.0 5296329.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 28 50 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 13 24 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1960 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.3 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	Y 48 09/12/2013
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	22.6 Ft.	212 Structure Load Rated	08/29/2016
52 Deck Width	24.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-111-27.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	721	96	691	4	30	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	30	0	0	100	30	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	279	0	0	79	219	22	60	0	0
1000/2:Corrosion	ft	279	0	0	79	219	22	60	0	0
Notes:Rusting to various members of all Girders. See Photo. - 11/20/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	80	80	0	0	20	20
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	80	80	0	0	20	20
Notes:Areas of limited to no coating causing no effectiveness. - 11/20/2019										
215/2:Re Conc Abutment	ft	56	36	20	14	8	50	28	0	0
1080/2:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes:Minor spalling North Abutment. - 11/20/2019										
1130/2:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:Vertical cracking along North Abutment. - 11/20/2019										
4000/2:Settlement	ft	28	0	0	0	0	100	28	0	0
Notes:Outward lean on top with inward lean at bottom to South Abutment. South Abutment Leans 2 3/4" in 4'. See Alert Code 2. - 11/20/2019										
330/1:Metal Bridge Railing	ft	59	100	59	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	80	80	20	20	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	20	0	0	100	20	0	0	0	0
Notes:Peeling to coating along east railing. - 11/20/2019										
331/1:Re Conc Bridge Railing	ft	59	100	59	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	4	100	4	0	0	0	0	0	0
Notes:Minor cracking to both curbs. - 11/20/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/23/2005 - South abutment leans in 2" (in 4 ft) measured at center. Both abutments have moved inward. South 6.75", North 3.5". 01/02/2008 - Lean unchanged. Abutments moving in, now measure south 7 1/4", north 4" in 4 ft. [] NBI Remarks: Minor cracks in both abutments. Exposed footings. Ice damage causing west outside channel beam to lean in at the bottom. Continued inward movement of both abutments with the south abutment moving in from 4" to 7 1/4" in the last 4 inspection cycles. No change of inward movement at the south abutment in 2010 or 2011. Minor spalling under beams south abutment. 10/2015 - No change in lean at the south abutment and no inward movement of abutments in 2015. 10/2017 - South abutment moving inward 8" measured at center. South abutment leans away 2 3/4" in 4'. Additional movement observed. Inspection incomplete due to High Water. See Photo. 10/16/2019. Inspection Completed 11/20/2019. - 11/20/2019

Alert Code 2: South abutment moved inward 8" - 7 1/4" previously & 6 3/4" before that. South abutment leans away 2 3/4" in 4', 2" in 4' previously. North abutment moved in 4 3/4" measured @ center. No change in lean in 2011. Scour hole under structure 24' x 30' x 5.0' Deep. Additional lateral inward movement observed in 2013, no lean change in 2013. 10/2015 - Scour hole runs along the south abutment and is beginning to undermine the footings. 11/2019 - No Change in inward movement and lean. - 11/20/2019

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SEC 409

Structure Number: 18-111-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GRACE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 2 NORTH NORTHWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 46' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	599931.2 5291907.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	October 31, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	29.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	10/30/2018
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 14 X 9 X 44' rcb		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 18-111-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	88	100	88	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10/2018 - Bridge replaced with a double 14' x 9' RCBC.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-111-36.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LIND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST 3 SOUTH NORTHWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 40' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 40' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	599986.3 5281854.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1995 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 05, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-18(20)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X10X54' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-111-36.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	108	100	108	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Channel bank erosion upstream & downstream. 8/2015 - Minor sediment build up of 1' north barrel - 8/5/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-112-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	75.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	INKSTER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SO BRANCH FOREST RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH INKSTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 10' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 38' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	600808.9 5337122.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 43 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 26 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1973 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	32 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.6 Ft.	Underwater	N
48 Length of Max Span	53 Ft.	Other Special	N
49 Structure Length	109.91 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.9 Ft.	212 Structure Load Rated	03/23/2018
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 18-112-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	971	100	971	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
1130/3:Cracking (RC and Other)	ft	3	100	3	0	0	0	0	0	0
Notes:Vertical Cracks to Pier. - 10/8/2019										
215/2:Re Conc Abutment	ft	59	0	0	49	29	51	30	0	0
4000/2:Settlement	ft	59	0	0	49	29	51	30	0	0
Notes:Continued Lean and Inward Movement to South Abutment. Lean Observed at 2 3/4" in 4' Inward Movement observed at 14 1/4". Refer to Alert code 2. See Photo. - 10/8/2019										
330/1:Metal Bridge Railing	ft	220	100	220	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	220	100	220	0	0	0	0	0	0
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:South Abutment leans inward and has inward movement at the SE Corner. See Alert Code 2. - 10/8/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/13/2005 - Center pier footing exposed. Abutments leaning - South abutment 2", North abutment 1" in 4' at center of abutment. Remarks: Poor vertical roadway alignment from north. Cracks in north abutment and diagonal cracks in all wings. Movement inward of both abutments, mostly at east corners. Bank erosion west of structure. Channel runs through south span only. Erosion around SE Wing. - 10/8/2019

Alert Code 2: South abutment leans in 2 1/2" in 4'. Additional Lean Observed at South Abutment. 10/2019 - South Abutment Leans 2 3/4" in 4'. Erosion exposing and undermining west end pier footing. Horizontal and vertical cracks in north abutment with abutment bowing outward near center with 1 1/4" in 4' lean inward, measured at center, no change in lean in 2013 and 2015, 2017, 2019. 10/2015 - South abutment moved in at the top 13" measured at the SE corner. 10/03/2017 - No change in lean both abutments. Inward movement at the top measures 13 1/2" at the south corner. 13" previously. Additional Movement Observed at South Abutment. 10/2019 - Inward movement at 14 1/4". - 10/8/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-112-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	39.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ELM GROVE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SO. BRANCH TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 3 NORTH LARIMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 56' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 38' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	601165.9 5310550.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 16 29 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 11 20 Tons
208 Dk Overburden	23 Gravel/Dirt	70 Bridge Posting	3 10.0-19.9%below
Age and Service		209 Posted in "Tons"	29 Tons
27 Yr Built	1966 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	3 Intolerable - Correct
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	95 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	3 Intolerable - Correct
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	Y 24 10/08/2019
47 Total Horizontal Clearance	16.7 Ft.	Underwater	N
48 Length of Max Span	52 Ft.	Other Special	N
49 Structure Length	55.12 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	18.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-112-18.0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-112-18.0

Remarks: Estimate movement at top of south abutment +/- 2 inches. NBI Remarks: Poor horizontal and vertical roadway alignment. Rusty stringers and truss members. Cross brace rods are bent. Posted narrow bridge both ends. Pack rust upper connection plates. South abutment moving in one inch @ the top. Vehicle damage to both railings. Channel bank erosion near northwest abutment corner and wing due to underground spring. South abutment moving in 2". Channel bank erosion near the NW wing. No additional access equipment used for the Fracture Critical Inspection. - 10/8/2019

Alert Code 2: Truss members bent-A-A sections U3-L3 rt. side, U2'-L2' both sides, E-E sections L2-U3, U3-L2' & L3'-U2' rt. side. Rusting of all steel members of Truss, - 10/8/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-112-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LARIMORE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH 2 WEST LARIMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 50' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	600496.6 5300033.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 37 68 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 22 41 Tons
208 Dk Overburden	25 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1956 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2019	71 Waterway Adequacy	4 Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	September 27, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.3 Ft.	Underwater	N
48 Length of Max Span	21 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	07/10/2017
	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-112-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	603	100	603	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	253	1	3	99	250	0	0	0	0
1000/2:Corrosion	ft	250	0	0	100	250	0	0	0	0
Notes:Minor corrosion w/some pitting to all girders. - 9/27/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	50	50	50	50
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	50	50	50	50
215/2:Re Conc Abutment	ft	49	96	47	4	2	0	0	0	0
331/1:Re Conc Bridge Railing	ft	49	98	48	2	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Minor spall area center of north curb - 9/27/2019										
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
Notes:1' deep scour hole under structure. - 9/27/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Exposed footings west abutment. Rusty stringers. No railings. Vegetation in channel both sides. Poor channel alignment both sides. - 9/27/2019

Alert Code 1: Scour hole under structure 20' x 20' x 1.0' deep. - 9/27/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-112-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	67.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GRACE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 2 WEST KEMPTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 49' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	600583.4 5298425.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 29 53 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1961 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	November 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.9 Ft.	Underwater	N
48 Length of Max Span	34 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/23/2018
	26.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-112-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	302	99	300	0	0	1	2	0	0
1090/2:Exposed Rebar	ft	2	0	0	0	0	100	2	0	0
Notes:Spalling with exposed rebar and section loss up to 4+" near mid length of Channel Beam 3 from the South. See Photo. - 11/20/2019										
215/2:Re Conc Abutment	ft	62	15	9	86	53	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. - 11/20/2019										
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Spalling near NW Top Corner. See Photo. - 11/20/2019										
1130/2:Cracking (RC and Other)	ft	29	31	9	69	20	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Vertical and diagonal cracking to West Abutment. See Photo. - 11/20/2019										
4000/2:Settlement	ft	31	0	0	100	31	0	0	0	0
Notes:Inward movement on top and outward movement at bottom causing lean to East Abutment. See Alert Code 2 for Lean Measurements. - 11/20/2019										
330/1:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Slope Protection Settled and Displaced along West Abutment. See Photo. - 11/20/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/23/2005 - Inward movement measured at south end of east abutment has increased. Previous 7.5" now 9.5" at top. North end unchanged at 7.5". Lean measured at center of abutment unchanged at 1.5" in 4 feet.
 12/27/2007 - No change in east abutment movement. 01/04/2010 - No change in east abutment movement. NBI
 Remarks: Horizontal and vertical cracks in both abutments. Concrete chunk out of bottom section of 3rd beam from south measures about 12" x 7" x 3". Located near center of span. Poor channel alignment from the west.
 No change in lean at east abutment in 2010. 24" CMP enters the channel through the NE wing. Riprap displaced west abutment. 10/2015 - Riprap displaced and settled at the west abutment. Inspection incomplete due to High Water. See Photo. 10/28/2019. Inspection Completed 11/20/2019. - 11/20/2019

Alert Code 2: East abutment moving in at the top 14 1/2" south and 9 3/4" on the north side, a change from 9 3/4" south and 9 1/2" north side previous inspection. East abutment leans in 2 1/4" in 4', measured @ center, a change from 2" in 4' previous inspection, 1" & 1 1/2" prior to that. Continued inward movement observed @ the east abutment in 2013. 10/2015 - East abutment moving in at the top 14 1/2" south end and 10 1/2" north no change south side additional 3/4" inward movement NE corner in 2015.No change in lean. 10/2017 - East abutment moved in 15 1/2" south side and 10 1/2" north side a change from 14 1/2" and 10 1/2" in 2015. East abutment leans in 2 1/2" in 4' a change from 2 1/4" in 2015. Continued movement in 2017. 10/2019 - Inward Movement NE Corner at 11". A change from 10 1/2" in 2017. Additional inward movement observed. Inward Movement at SE Corner at 16". A change from 15 1/2" in 2017. Additional inward movement observed. No Lean Measurements in 10/2019 due to High Water. 11/2019 - East Abutment Leans 2 3/4" in 4' Previous 2 1/4". Additional Lean observed. - 11/20/2019

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SEC 409

Structure Number: 18-112-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GRACE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST KEMPTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 49' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 38' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	601201.8 5296820.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1989 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2013	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	16.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 08, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	OM-0020(19) FHWA OM-AD-20(19)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 8'X5'X50' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-112-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	151	100	151	0	0	0	0	0	0
1130/3:Cracking (RC and Other)	ft	5	100	5	0	0	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Alert Code 1: 8/2017 - Scour hole 1.5' x 10' x 1.5' deep yust off north end of center and east barrel.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-112-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GRACE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 4 WEST NORTHWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 46' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	600490.1 5291970.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 26 48 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2004 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	3 Intolerable - Correct
29 ADT	26 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	August 05, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.5 Ft.	Underwater	N
48 Length of Max Span	42 Ft.	Other Special	N
49 Structure Length	44.95 Ft.	218 Channel Profile	1 48 05/16/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	31.5 Ft.	212 Structure Load Rated	12/02/2004
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	H Hwy beneath struct	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	H Hwy beneath struct	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-112-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	360	100	360	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	70	97	68	1	1	1	1	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	50	1	50	1	0	0
Notes:Two minor spall areas east abutment near south end - see photo. - 8/5/2019										
1130/2:Cracking (RC and Other)	ft	3	100	3	0	0	0	0	0	0
Notes:Minor vertical cracks east abutment. - 8/5/2019										
330/2:Metal Bridge Railing	ft	90	100	90	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [NBI Remarks: Some spalling under beams east abutment. Minor vertical cracks in east abutment. - 8/5/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-112-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	66.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GRACE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GOOSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 2 NORTH NORTHWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 45' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 38' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	601567.0 5290933.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 45 81 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 27 49 Tons
208 Dk Overburden	23 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1968 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	4 Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	4 Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	15 Ft.	90 Date of Last Inspection	November 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.0 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	32.15 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	19.4 Ft.	212 Structure Load Rated	08/29/2016
52 Deck Width	20.3 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-112-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	614	100	614	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	279	0	0	64	179	36	100	0	0
1000/2:Corrosion	ft	279	0	0	64	179	36	100	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Rusting to all Girders. See Photo. - 11/20/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Limited effectiveness to the Girders. - 11/20/2019										
215/3:Re Conc Abutment	ft	39	0	0	100	39	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	19	0	0	100	19	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Abrasion along North Abutment along the water line. See Photo. Abrasion to south Abutment also. - 11/20/2019										
4000/3:Settlement	ft	20	0	0	100	20	0	0	0	0
Notes:South abutment leans inward at the top and outward at the bottom. Lean measured 3 3/4" in 4' measured near center. See Photo. - 11/20/2019										
330/1:Metal Bridge Railing	ft	62	100	62	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	0	0	25	1	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. - 11/20/2019										
1130/3:Cracking (RC and Other)	each	1	0	0	0	0	100	1	0	0
Notes:Moderate cracking and spalling to NE Wing. See Photo. - 11/20/2019										

Remarks: 12/23/2005 - South abutment has changed by 1/4". Lean in measurements 3" E and 2 3/4" W top of abutment has moved 16". 12/26/2007 - No change in lean measurements. NBI Remarks: Large vertical crack at abutment backwall and corner of northeast wing. Poor channel alignment from the west. Chunk of concrete missing at northeast wing. North abutment moving inward 1 3/4" at the northwest corner. Concrete deterioration at bottom of both abutments with up to 1/2" section loss. 10/2017 - Riprap placed at all wing corners in 2016. Channel Bank Erosion down stream. See Photo. Inspection incomplete due to High Water. See Photo. 10/28/2019. Inspection completed 11/20/2019. - 11/20/2019

Alert Code 2: South abutment moved inward 20", a change from 18 1/2" previous inspection. 10/2017 - South abutment leans in 3 3/4" in 4' measured near center. Measurement moved in 2017 due to riprap. Some additional movement in 2017. 11/2019 - No Change in Lean and Inward Movement. Steel Girders not resting on front portion of the Abutment due to the lean. See Photo. - 11/20/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-112-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LIND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 3 SOUTH NORTHWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 38' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	601589.8 5282556.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 46 83 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	September 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	212 Structure Load Rated	03/23/2018
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-112-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	351	96	336	0	0	4	15	0	0
1100/2:Exposed Prestressing	ft	5	0	0	0	0	100	5	0	0
Notes:West outside leg of quad tee beam - see photo - 9/25/2019										
1110/2:Cracking (PSC)	ft	10	0	0	0	0	100	10	0	0
Notes:Ice impact damage to west outside leg of quad tee beam - 9/25/2019										
206/2:Timber Column	each	16	94	15	6	1	0	0	0	0
1180/2:Abrasion	each	1	0	0	100	1	0	0	0	0
Notes:Minor abrasion to west outside pile north abutment. - 9/25/2019										
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	98	100	98	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Old concrete abutment in channel. Poor horizontal roadway alignment. Minor fire damage to northeast wing. Southwest wing pile rotting. 9/2015 - South channel bank erosion both sides of structure. - 9/25/2019

Alert Code 1: Impact damage to west outside beam exposing reinforcing steel and tendon. - 9/25/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-113-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GRACE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 SOUTH 1 WEST LARIMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 48' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 38' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	601597.9 5295206.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 31, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.0 Ft.	Underwater	N
48 Length of Max Span	16 Ft.	Other Special	N
49 Structure Length	35.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	10/30/2018
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 16 X 6 X 44' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-113-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	88	100	88	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10/2018 - Bridge replaced with a double 16' x 6' RCB.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-113-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GRACE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 1 WEST KEMPTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 47' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 38' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	601824.3 5293614.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 29 53 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
208 Dk Overburden	202 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1964 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2013	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	September 05, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/09/2017
	27.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-113-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	279	99	277	1	2	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes: _										
206/3:Timber Column	each	18	100	18	0	0	0	0	0	0
216/3:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	62	100	62	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor horizontal roadway alignmen from the west. Poor channel alignment. Channel beams #3, 4 and 6 from north have small areas of minor spalling. Top of southwest wing plank broke.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-113-28.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	70.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GRACE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 1 WEST KEMPTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 47' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 38' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	601621.7 5293591.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 19 35 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 11 21 Tons
208 Dk Overburden	25 Gravel/Dirt	70 Bridge Posting	4 0.1-9.9%below
Age and Service		209 Posted in "Tons"	27 Tons
27 Yr Built	1949 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	September 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.3 Ft.	Underwater	N
48 Length of Max Span	26 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	212 Structure Load Rated	07/10/2017
52 Deck Width	26.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-113-28.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	764	100	764	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	331	0	0	100	331	0	0	0	0
1000/2:Corrosion	ft	331	0	0	100	331	0	0	0	0
Notes:Minor corrosion all girders - 9/25/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No protection of the steel coating - 9/25/2019										
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
111/2:Timber Open Girder	ft	180	93	168	0	0	7	12	0	0
1160/2:Crack (Timber)	ft	12	0	0	0	0	100	12	0	0
Notes:One girder in timber girders #1& 12 are cracked, adjacent girder in good condition. - 9/25/2019										
215/2:Re Conc Abutment	ft	52	46	24	0	0	48	25	6	3
1080/2:Delamination/Spall/Patched Area	ft	22	0	0	0	0	86	19	14	3
Notes:Both abutment backwall deteriorating w/exposed rebar - 9/25/2019										
1090/2:Exposed Rebar	ft	6	0	0	0	0	100	6	0	0
Notes:Lower portion bot abutments. - 9/25/2019										
235/2:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	59	100	59	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	59	100	59	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor horizontal roadway alignment. Roadway embankment erosion, southwest abutment corner. Vertical crack in east abutment. Riprap added to both banks under structure and thru channel. - 9/25/2019

Alert Code 1: Two cracked timber girders, #1 & # 12 double timber girders with one cracked in each girder. Concrete in abutment backwalls deteriorating with exposed reinforcing steel @ west abutment corner with up to 2" of spalling and section loss. - 9/25/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-114-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	STRABANE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SOUTH BRANCH FOREST RIVE	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 3 NORTH INKSTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 11' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 36' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	603969.8 5337875.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 30 54 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 33 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1966 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	4 Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	September 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.7 Ft.	Underwater	N
48 Length of Max Span	58 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	19.7 Ft.	212 Structure Load Rated	03/23/2018
52 Deck Width	21.7 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 18-114-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	404	98	396	2	8	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	8	0	0	100	8	0	0	0	0
Notes:Minor spalling lower portion of south outside beam. - 9/23/2019										
215/2:Re Conc Abutment	ft	43	51	22	49	21	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	21	0	0	100	21	0	0	0	0
Notes:Minor spalling under beams east abutment. - 9/23/2019										
330/1:Metal Bridge Railing	ft	121	100	121	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	121	100	121	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/3:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Slope protection settled, displaced both abutments. - 9/23/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor horizontal roadway alignment. Posted 20 mph speed limit. Channel bank erosion up & downstream. Minor cracking NW corner west abutment. Displaced riprap both abutments. 9/2015 - Horizontal crack/spall lower portion east abutment. Minor areas of spalling south outside beam. - 9/23/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-114-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	HEGTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 6 EAST MCCANNA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 58' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 36' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	603522.9 5314581.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	6 Corrugated Steel	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 25 46 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 12 23 Tons
208 Dk Overburden	25 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1960 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	September 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.6 Ft.	Underwater	N
48 Length of Max Span	34 Ft.	Other Special	N
49 Structure Length	37.07 Ft.	218 Channel Profile	1 48 05/18/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	25.6 Ft.	212 Structure Load Rated	08/29/2016
52 Deck Width	25.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-114-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
30/1:Steel Deck - Orthotropic	sq.ft	947	100	947	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Minor fading of protective coating underside of deck - see photo. - 9/3/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Minor fading underside of deck - see photo. - 9/3/2019										
107/2:Steel Opn Girder/Beam	ft	476	0	0	100	476	0	0	0	0
1000/2:Corrosion	ft	476	0	0	100	476	0	0	0	0
Notes:Freckled rust bottom flange all girders - see photo. - 9/3/2019										
515/2:Steel Protective Coating	sq.ft	100	10	10	90	90	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	10	10	90	90	0	0	0	0
215/2:Re Conc Abutment	ft	52	50	26	40	21	10	5	0	0
1080/2:Delamination/Spall/Patched Area	ft	12	0	0	58	7	42	5	0	0
Notes:Spalling along top of west abutment from inward movement see photo. - 9/3/2019										
4000/2:Settlement	ft	14	0	0	100	14	0	0	0	0
Notes:Minor vertical inward movement of the west abutment causing spalling to the upper portion of the west abutment. - 9/3/2019										
330/1:Metal Bridge Railing	ft	75	93	70	7	5	0	0	0	0
7000/1:Damage	ft	5	0	0	100	5	0	0	0	0
Notes:Northwest corner not attached to post. - 9/3/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Minor settlement/displacement of the east abutment slope protection. - 9/3/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb. Concrete spalling along west abutment at bridge seat. Channel embankment erosion north & south of structure. Paint failing with freckled rust to all girders. West abutment moved in 2". Northwest bridge rail not attached to end post. Conduit attached to outside guardrail posts - north side. Both abutment footings exposed. Poor channel alignment to the north. Poor vertical roadway alignment to the west. End wall concrete spalling between beams @ the west abutment. Slope protection displaced @ the east abutment. No change in west abutment inward movement observed in 2013 or 2015. 9/2015 - North half of east abutment footing exposed. 9/5/2017 - No change in west abutment movement. - 9/3/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-114-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	65.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	HEGTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 2 SOUTH MCCANNA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 57' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 36' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	604320.7 5313452.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 36 65 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 31 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1962 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.9 Ft.	Underwater	N
48 Length of Max Span	33 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	1 48 05/18/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.2 Ft.	212 Structure Load Rated	10/21/2013
52 Deck Width	28.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 18-114-16.0

[illegible]

Remarks: Date 11/14/2003 - Concrete post broke at NW corner of bridge rail due to abutment movement. North abutment leans 1 3/4" in at west end north abutment. 12/15/2005 - No change in lean measurement North abutment. See photo for lean at NW corner and breaking of concrete post. 01/03/2007 - North abutment, no lean change. 12/14/2009 - No lean change. ☐ NBI Remarks: Poor vertical roadway alignment from the south. Vertical cracks both abutments and wings. Channel bank erosion both sides of structure. Damage to northwest end post due to abutment movement. Volunteer Tree Growth at tops of NW, SW, NE Abutments. NW Concrete Rail Post damage and broken from Inward Movement. See Photo. - 11/4/2019

Alert Code 1: U-shaped cracks in both abutments from upper corners to lower portion of wall at center open to 1/8". Beaver dam under structure blocking flow thru channel - See photo - 11/4/2019

Alert Code 2: 11/2019: North Abutment moving inward 15 1/2" at NW Corner and 8 1/2" NE Corner. Additional inward movement observed. See Photo. Both abutments moving inward, north abutment approximately 8 inches east side, 14 1/2" west side. 11/2019 South Abutment Inward Movement of 3 1/2" SE Corner. No Change. Inward movement of 3" SW Corner. A change from 2 1/2" Previous. Additional inward movement observed SW Corner. South abutment 3 1/2" SE corner 2 1/2" SW corner continued inward movement in 2015. 11/2019 Lean of 2 1/2" at NW Corner. A change from 1 3/4" previous measurement. Additional lean observed in 2019. No change in lean at the north abutment in 2015. Some inward movement noted in 2011. No additional movement observed in 2013. North abutment leans in 2" in 4' measured at the NW corner. A change from 1 3/4" in 4' in 2007. No change in 2013. North abutment leans in 2" in 4' measured at the NW corner. A change from 1 3/4" in 4' in 2007. No change in 2013. North abutment leans in 2" in 4' measured at the NW corner. A change from 1 3/4" in 4' in 2007. No change in 2013. North abutment leans in 2" in 4' measured at the NW corner. A change from 1 3/4" in 4' in 2007. No change in 2013.v North abutment leans in 2" in 4' measured at the NW corner. A change from 1 3/4" in 4' in 2007. No change in 2013. North abutment leans in 2" in 4' measured at the NW corner. A change from 1 3/4" in 4' in 2007. - 11/4/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-114-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	AVON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GOOSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 2 WEST NORTHWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 45' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 36' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	604066.5 5290402.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 49 88 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 29 53 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1994 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	August 05, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	45.93 Ft.	218 Channel Profile	1 48 05/17/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/23/2018
	27.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 18-114-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	322	100	322	0	0	0	0	0	0
206/2:Timber Column	each	18	100	18	0	0	0	0	0	0
216/2:Timber Abutment	ft	66	94	62	0	0	6	4	0	0
1160/2:Crack (Timber)	ft	4	0	0	0	0	100	4	0	0
Notes:One west abutment plank form ice damage. - 8/5/2019										
235/2:Timber Pier Cap	ft	66	55	36	46	30	0	0	0	0
1150/2:Check/Shake	ft	33	9	3	91	30	0	0	0	0
Notes:West abutment cap entire length - see photo. - 8/5/2019										
330/1:Metal Bridge Railing	ft	92	100	92	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb. Four ft. of one west abutment plank cracked. Checking in center of west abutment cap. Utility cable attached to south side railing posts. Poor channel alignment from the north. Slight sag both abutment caps. - 8/5/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-114-32.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	NORTHWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01815 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GOOSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST OF NORTHWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.100	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 37' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	603336.1 5287199.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 34 63 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1996 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	235 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	23.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.6 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	100.07 Ft.	218 Channel Profile	1 48 05/16/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	03/23/2018
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	BRC-1815(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 18-114-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,003	100	3,003	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	384	100	384	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	200	100	200	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb. Large tree branch lodged against center pier north side - see photo. - 9/26/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-115-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	70.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	STRABANE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SOUTH BRANCH FOREST RIVE	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 3 NORTH INKSTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 11' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 34' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	605606.3 5338135.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 36 64 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 39 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1959 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	95.14 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/09/2017
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-115-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	735	98	722	2	13	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
Notes:Spalling at joints to top of Beams. - 10/24/2019										
1090/2:Exposed Rebar	ft	3	0	0	100	3	0	0	0	0
210/3:Re Conc Pier Wall	ft	82	94	77	0	0	6	5	0	0
1080/3:Delamination/Spall/Patched Area	ft	3	0	0	0	0	100	3	0	0
Notes:Spalling to top corners of all piers. See Photo. - 10/24/2019										
1090/3:Exposed Rebar	ft	2	0	0	0	0	100	2	0	0
Notes:Spalling with exposed rebar to corners of Pier 2 and 3. See Photo. - 10/24/2019										
215/2:Re Conc Abutment	ft	56	0	0	50	28	50	28	0	0
4000/2:Settlement	ft	56	0	0	50	28	50	28	0	0
Notes:Settlement with lean to both abutments. 6 1/4" in 4' to South abutment. 1 1/4" in 4' to North Abutment. See Photo and alert Code 2. - 10/24/2019										
330/1:Metal Bridge Railing	ft	190	100	190	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	75	75	25	25	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	25	0	0	100	25	0	0	0	0
Notes:Minor peeling to coating on Metal Bridge Railing. - 10/24/2019										
331/1:Re Conc Bridge Railing	ft	190	99	188	1	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Spalling to joint at West Curb. See Photo. - 10/24/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/13/2005 - Abutment lean in at top. North abutment 1" in 4' South abutment 4.5" in 4' a 3/4" increase. See Photos. 12/17/2007 - No change in lean. 12/09/2009 - South abutment leans in 4.75" in 4', 4.5" in 4' previously. NBI Remarks: Vertical cracks both abutments. Spalled concrete with exposed rebar on top outside corners of all piers. Diagonal cracks in NW wing. "DIP", "5 MPH" & "SLOW" signs both ends of structure. Continuous inward movement of the south abutment from 4 1/2" in 4' in 2005 to 5 1/2" in 4' in 2013. 10/2015 - In 2014 county removed tree debris buildup and placed riprap along both abutments and wings. Placed riprap in the SE ditch where it enters the channel near the SE wing. 10/2019 - Volunteer Tree Growth to NW Wing. - 10/24/2019

Alert Code 1: Beams @ pier #2 not centered on pier cap. North beams sitting 11" on the pier, south beams sitting 5 1/2" on the pier measured on the east side. North beam setting 11" on the pier and south beam setting 6" on pier 2. - 10/24/2019

Alert Code 2: S. abut. moved in 20" at the top, measured @ the SW corner, 19" previous inspection. Continuous inward movement of the south abutment from 4 1/2" in 4' in 2005 to 5 1/2" in 4' in 2013. South abutment leans in 6 1/4" in 4'. Additional Movement Observed in 2019. Previous lean of 6" in 4', 5 1/2" in 4' previous & 4 3/4" in 4' prior to that. North abutment leans in 1 1/4" in 4', 1" in 4' previous inspection. No change in 2015. Continued movement of the south abutment observed in 2015. 10/2017 - No additional lean change at abutments in 2017. Unable to measure inward movement due to material placed behind abutment corners. No change in beam/pier measurements in 2019. - 10/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-115-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	HEGTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 6 EAST MCCANNA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 57' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 35' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	605214.1 5313002.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 37 67 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 41 Tons
208 Dk Overburden	25 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1960 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	44.95 Ft.	218 Channel Profile	1 48 05/18/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.9 Ft.	212 Structure Load Rated	03/23/2018
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-115-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	384	100	384	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	56	50	28	50	28	0	0	0	0
4000/2:Settlement	ft	28	0	0	100	28	0	0	0	0
Notes:Inward movement at the top causing spalling, outward movement at the bottom causing U-Shape crack and lean to. West Abutment. See Alert code 1 for Measurements. - 11/25/2019										
330/1:Metal Bridge Railing	ft	89	100	89	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	89	100	89	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Rip Rap along West Abutment settled and displaced. - 11/25/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor vertical roadway alignment from the east. Spalling and cracking at bridge seat corners - west abutment. Moderate u-shaped crack in West abutment. Channel bank erosion both banks both sides of structure. Damage to 4 cracked posts. Near NW Corner. See Photo. Poor channel alignment to the north. 10/2017 - No changes in lean. Minor diagonal cracking to NW and SW Wings. Inspection incomplete due to High Water. See Photo. 10/24/2019. Inspection completed 11/25/2019. - 11/25/2019

Alert Code 1: West abutment leans back 1 1/4" in 4' top half of abutment - west abutment bowed with u-shaped cracks open to 1/8". No change in 2013. 1/4" movement in 2015, 2017, and 2019. - 11/25/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-115-18.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	HEGTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01815 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 3 NORTH LARIMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.400	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 56' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 34' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	605988.6 5310299.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 44 79 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 20 38 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	170 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	August 05, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.8 Ft.	Underwater	N
48 Length of Max Span	71 Ft.	Other Special	N
49 Structure Length	75.13 Ft.	218 Channel Profile	1 48 05/18/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/23/2018
	32.2 Ft.	213 Federal Aid Project Number	CDE-H111(801)182
52 Deck Width	34.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-115-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,400	97	2,330	2	35	2	35	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	50	0	0	30	15	70	35	0	0
Notes:Areas of delamination /spalling throughout the deck- see photos - 8/5/2019										
1090/1:Exposed Rebar	sq.ft	20	0	0	100	20	0	0	0	0
Notes:Areas of exposed rebar throughout the deck -see photos. - 8/5/2019										
104/2:Pre Clsd Box Girder	ft	354	100	354	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	69	94	65	6	4	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	4	0	0	100	4	0	0	0	0
Notes:Minor cracking w/efflorescence upper northwest corner north abutment. - 8/5/2019										
330/1:Metal Bridge Railing	ft	151	100	151	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:North abutment slope protection settled/displaced. - 8/5/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Channel bank erosion southeast side - downstream. Some channel bank erosion under structure near the north abutment with some riprap displaced. 8/2015 - Areas of the deck spalling and delamination. Minor cracking w/efflorescence northwest corner north abutment. - 8/5/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-115-34.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	56.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	NORTHWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GOOSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 1 WEST NORTHWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 42' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 35' 52.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	605191.7 5285058.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 22 41 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 12 23 Tons
208 Dk Overburden	26 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1959 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	31 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	November 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	37 Ft.	Other Special	N
49 Structure Length	41.01 Ft.	218 Channel Profile	1 48 05/16/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.9 Ft.	212 Structure Load Rated	08/29/2016
52 Deck Width	26.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-115-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,066	100	1,066	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	531	0	0	19	100	81	431	0	0
1000/2:Corrosion	ft	531	0	0	19	100	81	431	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Rusting to all members of girders. See Photo. - 11/20/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	50	50	50	50	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	50	50	50	50	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Areas in limited coating and effectiveness. - 11/20/2019										
111/2:Timber Open Girder	ft	82	100	82	0	0	0	0	0	0
202/2:Steel Column	each	10	0	0	0	0	100	10	0	0
1000/2:Corrosion	each	10	0	0	0	0	100	10	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Rusting to all vertical columns. See photo. - 11/20/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. No Coating. Loss of Effectiveness. - 11/20/2019										
206/2:Timber Column	each	4	100	4	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	46	0	0	50	23	44	20	7	3
1080/2:Delamination/Spall/Patched Area	ft	20	0	0	0	0	100	20	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Moderate spalling with section loss along bottom of North Abutment. - 11/20/2019										
1130/2:Cracking (RC and Other)	ft	3	0	0	0	0	0	0	100	3
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Severe Vertical Cracking near NE Corner of North Abutment. See Photo. - 11/20/2019										
4000/2:Settlement	ft	23	0	0	100	23	0	0	0	0
Notes:Inward movement at the bottom causing lean away at the top. 3 1/2" in 4' at South Abutment. See Alert Code 2. - 11/20/2019										
216/2:Timber Abutment	ft	20	100	20	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	82	100	82	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	82	100	82	0	0	0	0	0	0
8398/2:Slope Protection	each	2	50	1	50	1	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. - 11/20/2019										
4000/2:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Slope protection along North Abutment settled and displaced. - 11/20/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [] NBI Remarks: Severe concrete deterioration with rusty exposed rebar both abutments. Poor vertical roadway alignment from the south. Channel bank erosion both banks both sides of structure. No change in lean in 2010, 2011 & 2013. Cracked Timber Post near SE Corner. See Photo. Tree drift west of Structure restricting flow. See Photo. Inspection incomplete due to High Water. See Photo. 10/28/2019. Inspection completed 11/20/2019. - 11/20/2019

Alert Code 1: Tree Debris Buildup West of structure. See Photo. - 11/20/2019

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SEC 409

Structure Number: 18-115-34.0

Alert Code 2: Severe concrete deterioration with rusty exposed rebar both abutments. Both abutments lean back-south abutment 3 1/2" in 4', north abutment 3" in 4' measured at center. Three inches of section loss to bottom of north abutment concrete. 10/2015 - No change in lean. 10/2017 - No change in lean. 11/2019 - No Change in Lean at both Abutments. - 11/20/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-115-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	NORTHWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GOOSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH OF NORTHWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 34' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	606406.5 5282567.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 23 42 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	September 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	80 Ft.	Other Special	N
49 Structure Length	83.99 Ft.	218 Channel Profile	1 48 05/16/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	03/23/2018
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	BRO-18(6)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-115-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,357	100	2,357	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	335	100	335	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	167	100	167	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: No curb. Channel bank erosion both banks both sides of structure. 9/2017 - Tree growth near all wings and in channel both sides. Large amount of tree drift blocking flow thru channel approximately 300' downstream. - 9/25/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-116-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	STRABANE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect SO. BRANCH FOREST RIVER		102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 2 NORTH INKSTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 11' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 33' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	607223.6 5337749.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 38 69 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1993 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	44 Ft.	Other Special	N
49 Structure Length	100.07 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/26/2018
	27.9 Ft.	213 Federal Aid Project Number	BRO-18(18)
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-116-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,788	100	2,788	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	384	100	384	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	200	100	200	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Silt buildup in the south span, channel runs through the north span. Southeast ditch erosion where it enters the channel near the southeast wing. Channel bank erosion downstream. 9/2015 - Volunteer tree growth near all wings. - 9/23/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-118-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	47.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	STRABANE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 2 SOUTH JOHNSTOWN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 07' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 30' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	610548.0 5331859.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 11 19 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 7 14 Tons
208 Dk Overburden	24 Gravel/Dirt	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	20 Tons
27 Yr Built	1950 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	3 Intolerable - Correct
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	October 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	Y 24 10/24/2019
47 Total Horizontal Clearance	16.7 Ft.	Underwater	N
48 Length of Max Span	31 Ft.	Other Special	N
49 Structure Length	33.14 Ft.	218 Channel Profile	1 48 05/22/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-118-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	560	100	560	0	0	0	0	0	0
113/2:Steel Stringer	ft	308	0	0	91	280	9	28	0	0
1000/2:Corrosion	ft	308	0	0	91	280	9	28	0	0
Notes:Rusting to all Girders. See Photo. - 10/24/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of Effectiveness. - 10/24/2019										
120/2:Steel Truss	ft	66	0	0	70	46	30	20	0	0
Notes:Rusting to all truss members. - 10/24/2019										
1020/2:Connection	ft	20	0	0	0	0	100	20	0	0
Notes:Total of 20 rivets missing on each side of connection plates where it attaches to angle braces lower chord. See Photo. - 10/24/2019										
1900/2:Distortion	ft	44	0	0	100	44	0	0	0	0
Notes:West Truss bowed to the east 2". See Photo. - 10/24/2019										
7000/2:Damage	ft	2	0	0	100	2	0	0	0	0
Notes:Damage to NW Corner and SE Corner of Truss. - 10/24/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of effectiveness. - 10/24/2019										
152/2:Steel Floor Beam	ft	16	0	0	75	12	25	4	0	0
1000/2:Corrosion	ft	12	0	0	100	12	0	0	0	0
Notes:Rusting too Floor Beams. - 10/24/2019										
1020/2:Connection	ft	4	0	0	0	0	100	4	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:No Coating. Loss of effectiveness. - 10/24/2019										
215/2:Re Conc Abutment	ft	39	67	26	0	0	33	13	0	0
1080/2:Delamination/Spall/Patched Area	ft	10	0	0	0	0	100	10	0	0
Notes:Spalling with patched material underneath Stringers to Both Abutments. See Photo. - 10/24/2019										
1090/2:Exposed Rebar	ft	3	0	0	0	0	100	3	0	0
Notes:Spalling with exposed rebar North abutment. - 10/24/2019										
332/1:Timb Bridge Railing	ft	66	100	66	0	0	0	0	0	0
7357/1:Pack Rust	each	1	0	0	100	1	0	0	0	0
Notes:Pack rust forming on all lower connection plates both sides worse at L0 & L0' - 10/24/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Rusty stringers and truss members with some minor section loss. Embankment erosion behind all wing corners. Poor channel alignment. Diagonal and vertical cracks at the south abutment and the southwest wing. Poor vertical roadway alignment. Some spall areas with minor section loss, exposed rebar north abutment. - 10/24/2019

Alert Code 1: Structure bows east 2" measured at top west side. Scour hole under structure 15' x 15' x 3.0' deep. - 10/24/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-118-05.0

Alert Code 2: Pack rust forming on all lower connection plates both sides worse at L0 & L0'. Total of 20 rivets missing on each side of connection plates where it attaches to angle braces lower chord. - 10/24/2019

Fracture Critical: Inspection completed with no additional equipment used. - 10/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-118-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ARVILLA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 1 NORTH ARVILLA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 55' 17.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 31' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	609718.0 5308601.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 48 86 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 28 52 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2007 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.5 Ft.	Underwater	N
48 Length of Max Span	47 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 05/19/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/26/2018
	31.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-118-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	400	98	390	3	10	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
Notes:Very minor spalling along the top edges of some beams. - 8/6/2019										
215/2:Re Conc Abutment	ft	74	100	74	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	106	100	106	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Channel bank erosion west side north of structure. New structure in 2007. 8/2015 - Some minor spalling on the top edges of some beams. - 8/6/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-118-19.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ARVILLA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 NORTH ARVILLA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 55' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 30' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	610850.0 5309743.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 47 85 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 28 51 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1996 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	August 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.5 Ft.	Underwater	N
48 Length of Max Span	60 Ft.	Other Special	N
49 Structure Length	63.98 Ft.	218 Channel Profile	1 48 05/19/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/26/2018
	29.9 Ft.	213 Federal Aid Project Number	GF 118-19.1
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-118-19.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	594	100	594	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	72	100	72	0	0	0	0	0	0
1130/2:Cracking (RC and Other)	ft	4	100	4	0	0	0	0	0	0
Notes:Minor diagonal cracking near wing corners. - 8/6/2019										
330/1:Metal Bridge Railing	ft	118	100	118	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/1:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Minor settlement both abutments exposing footing - see photos. - 8/6/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Both abutment footings exposed. Minor cracking at wing corners. Tree growth on channel bank near structure. Riprap displaced at both abutments. Posted 30 MPH, local traffic only - north end only. - 8/6/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-118-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	45.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ARVILLA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HAZEN BROOK	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 4 EAST LARIMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 51' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 31' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	609729.3 5301796.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 11 20 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 8 15 Tons
208 Dk Overburden	1 None	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	20 Tons
27 Yr Built	1960 106 Yr Reconstructed	2015	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	4 Minimum Tolerable
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	25 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	2019	71 Waterway Adequacy	8 Equal Desirable
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	6 Equal Min Criteria
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	12 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	August 28, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	25.9 Ft.	Fracture Critical	Y 24 08/28/2019
48 Length of Max Span	27 Ft.	Underwater	N
49 Structure Length	28.87 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.6 Ft Rt-Side	218 Channel Profile	1 48 05/19/2017
	0.6 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	25.2 Ft.	207 Transporter Erector Routes and Sites	-1
52 Deck Width	26.4 Ft.	212 Structure Load Rated	09/29/2015
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Nefstead, Fischer
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-118-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	766	100	766	0	0	0	0	0	0
113/2:Steel Stringer	ft	616	0	0	25	154	73	452	2	10
1000/2:Corrosion	ft	616	0	0	25	154	73	452	2	10
Notes:Corrosion throughout entire length of stringers. Areas towards east abutment with corrosion causing section loss through webs. See Alert Code 2. - 8/28/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating System. - 8/28/2019										
117/1:Timber Stringer	ft	52	65	34	35	18	0	0	0	0
1160/1:Crack (Timber)	ft	3	0	0	100	3	0	0	0	0
Notes:Horizontal Crack to Timber Stringer 8 towards East Abutment. - 8/28/2019										
1180/1:Abrasion	ft	15	0	0	100	15	0	0	0	0
Notes:Abrasion to Timber Stringer 8 towards east abutment. - 8/28/2019										
120/2:Steel Truss	ft	59	0	0	66	39	17	10	17	10
1000/2:Corrosion	ft	49	0	0	80	39	20	10	0	0
Notes:Corrosion to entire truss with CS3 coating to vehicle damage on E-E sections. See Photo. - 8/28/2019										
7000/2:Damage	ft	10	0	0	0	0	0	0	100	10
Notes:Damage to E-E Members U1-L2, L2-U1' on North Truss and E-E Members U1-L2 on South Truss. See Photo. - 8/28/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating System Wing effectiveness to Truss causing rusting of all members. - 8/28/2019										
152/2:Steel Floor Beam	ft	30	0	0	0	0	100	30	0	0
1900/2:Distortion	ft	30	0	0	0	0	100	30	0	0
Notes:Sag up to 1" in center of Floor Beam. - 8/28/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No coating system on Floor Beam. - 8/28/2019										
206/3:Timber Column	each	14	86	12	14	2	0	0	0	0
1140/3:Decay/Section Loss	each	2	0	0	100	2	0	0	0	0
Notes:Decay section loss at waterline to Timber Columns of East Abutment. - 8/28/2019										
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	59	100	59	0	0	0	0	0	0
7357/2:Pack Rust	each	1	0	0	100	1	0	0	0	0
Notes:Pack Rust to Truss Connection Plates on Both Trusses. See Photo, - 8/28/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Truss is extremely rusty. Lower diagonal braces missing. Slight sag in floor beam. No railing. 8/20/2015 - In 2015 county forces added and replaced stringers in both pannels. New timber deck in 2015. Riprap added to front face of all wings. 8/2017 - Large amount of vegetation in channel. See Photo. - 8/28/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-118-23.0

Alert Code 2: Stringer #22 @ the west abutment rusted completely through the web, 1/4" section loss. Vehicle damage to EE sections from U1-L2, L2-U1 north side, and U1-L2 south side. Pitting rust on the web of stringers 5, 7, 11, 13 & 15 @ the east abutment. Piles rotting lower portion east abutment. Pack rust distressing upper & lower chord connections. Bottom flange and lower portion of web missing in stringer #19 near east abutment. Holes in web stringer #22 near east abutment. - 8/28/2019

Fracture Critical: No additional equipment used or needed for the fracture critical inspection. - 8/28/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-118-23.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ARVILLA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HAZEN BROOK	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH 1 WEST ARVILLA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 51' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 30' 60.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	610944.9 5302436.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 49 89 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 28 51 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1980 106 Yr Reconstructed -1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	50 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 05, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.2 Ft.	Other Special	N
48 Length of Max Span	42 Ft.	218 Channel Profile	1 48 05/19/2017
49 Structure Length	45.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	03/26/2018
51 Bridge Rdwy Width - Curb to Curb	27.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-118-23.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	318	100	318	0	0	0	0	0	0
206/2:Timber Column	each	14	100	14	0	0	0	0	0	0
216/2:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	92	100	92	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
7000/2:Damage	each	1	0	0	100	1	0	0	0	0
Notes:Minor fire damage to SE wing pile and 1 plank. - 8/5/2019										

Remarks: NBI Remarks: Fire damage to SE wing. Poor vertical roadway alignment. Poor channel alignment to the east.
Heavy vegetation in channel. Volunteer tree growth near south abutment both sides near wings. - 8/5/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-119-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	41.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	JOHNSTOWN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 2 SOUTH JOHNSTOWN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 07' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 29' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	612183.2 5331400.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 13 23 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 7 14 Tons
208 Dk Overburden	1 None	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	23 Tons
27 Yr Built	1959 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	November 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.0 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/25/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	07/10/2017
	22.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	23.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-119-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	570	83	470	18	100	0	0	0	0
1180/1:Abrasion	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Minor wear to top of deck planks. No Photo taken due to snow. - 11/25/2019										
107/2:Steel Opn Girder/Beam	ft	174	0	0	100	174	0	0	0	0
1000/2:Corrosion	ft	174	0	0	100	174	0	0	0	0
Notes:Rusting to all Girders. See Photo. - 11/25/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Loss of coating. No Effectiveness. - 11/25/2019										
111/2:Timber Open Girder	ft	66	100	66	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	39	0	0	82	32	18	7	0	0
1080/3:Delamination/Spall/Patched Area	ft	3	0	0	0	0	100	3	0	0
Notes:Spalling to all corners. Coded at North Abutment. See Photo. - 11/25/2019										
1090/3:Exposed Rebar	ft	4	0	0	0	0	100	4	0	0
Notes:Spalling with Exposed Rebar and section loss at both corners of North Abutment. - 11/25/2019										
4000/3:Settlement	ft	32	0	0	100	32	0	0	0	0
Notes:Inward movement at the top and outward movement at the bottom causing lean to both abutments. Refer to Alert Code 2 for measurements. - 11/25/2019										
235/2:Timber Pier Cap	ft	49	0	0	49	24	51	25	0	0
1900/2:Distortion	ft	49	0	0	49	24	51	25	0	0
Notes:Both North and South Abutment Cap tilting back due to the Lean. See Photo. - 11/25/2019										
332/1:Timb Bridge Railing	ft	49	74	36	27	13	0	0	0	0
1150/1:Check/Shake	ft	5	0	0	100	5	0	0	0	0
Notes:Check and Shake to West Curb near SW Corner. See Photo. - 11/25/2019										
1170/1:Split/Delamination (Timber)	ft	8	0	0	100	8	0	0	0	0
Notes:Split to Curb near NE and NW Corners. See Photo. - 11/25/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [] NBI Remarks: No railing. Poor horizontal roadway alignment. Vertical crack center south abutment. Rusty girders. Some new deck planks added in 2005. No lean measurement in 2009 or 2011 due to high water. No measurements in 2013 with little or no additional evidence of movement in 2013 Inspection incomplete due to Impassible roadway. 10/24/2019. Inspection completed 11/25/2019. Structure posted at 23 Tons. - 11/25/2019

Alert Code 1: Spalled concrete at upper corners of both abutments with approximately 6" - 8" of section loss with exposed rebar at the NE corner. - 11/25/2019

Alert Code 2: South abutment leans in 6 1/2" in 4', north abutment 1" in 4' measured at center with both timber caps tilting back. South abutment appears to be settling @ the SW corner. 10/2015 - Vertical crack center of south abutment open to 1/4". Some minor additional movement in 2015. 10/2017 - No additional movement at south abutment and no measurement at north abutment in 2017 and 2019. - 11/25/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-119-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GILBY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST GILBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 04' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 29' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	612270.0 5326461.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 29 53 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 17 32 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1949 106 Yr Reconstructed	2015	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	5 Above Min Tolerable
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	5 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	2019	71 Waterway Adequacy	7 Above Minimum
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	8 Equal Desirable Crit
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	14 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	September 03, 2019
34 Skew	10.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	25.0 Ft.	Fracture Critical	N
48 Length of Max Span	22 Ft.	Underwater	N
49 Structure Length	24.30 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.6 Ft Rt-Side	218 Channel Profile	1 48 05/22/2017
	0.6 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb		207 Transporter Erector Routes and Sites	
	25.0 Ft.	212 Structure Load Rated	09/10/2015
52 Deck Width	26.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-119-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	636	100	636	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	349	100	349	0	0	0	0	0	0
111/2:Timber Open Girder	ft	109	100	109	0	0	0	0	0	0
206/3:Timber Column	each	14	86	12	14	2	0	0	0	0
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes:Minor splits open to 1/4" at top of piles 3 & 4 south abutment. - 9/3/2019										
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	96	63	0	0	5	3	0	0
7000/2:Damage	ft	3	0	0	0	0	100	3	0	0
Notes:Ice impact damage to the east side of the north abutment cap w/ approximately 20-30% section loss, see photo. - 9/3/2019										
332/1:Timb Bridge Railing	ft	46	100	46	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [] NBI Remarks: No railing. Poor channel alignment. Some rotting of timber wings. Channel cleanout to the west in 2013. 8/20/2015 - New girders, deck, curb and riprap added in 2015. Heavy vegetation in channel and tree growth west side - see channel view. - 9/3/2019

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Structure Number: 18-119-08.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	63.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GILBY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 NORTH GILBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 05' 27.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 29' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	612253.3 5327491.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 11 20 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 6 12 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	14 Tons
27 Yr Built	1949 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	September 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	1 48 05/25/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	07/11/2017
	26.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-119-08.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	690	100	690	0	0	0	0	0	0
107/3:Steel Opn Girder/Beam	ft	290	100	290	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	50	50	50	50	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	50	50	50	50	0	0	0	0
111/2:Timber Open Girder	ft	242	100	242	0	0	0	0	0	0
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	56	89	50	11	6	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	56	100	56	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	48	100	48	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [] NBI Remarks: New timber deck, new stringers, new timber curb and rail in 2005. Channel cleaned out near structure in 2005. Riprap added under structure. County closed structure in 2011 due to fire damage to piling, girders & deck. 12/08/2011 - County replaced 8' of deck plank on west side, 12' of timber cap west side north abutment, new timber curb and railing posts west side, new NW wing and 2 new pile NW corner of the north abutment and a new 12" x 12" timber girder #6 in 11/2011. - 9/23/2019

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Structure Number: 18-120-10.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	80.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	GILBY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01819 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH OF GILBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	21.695	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 03' 29.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 28' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	613922.5 5323893.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	5 Moderate Damage
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1972 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	390 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	September 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10'X6'X34' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 18-120-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	69	48	33	36	25	16	11	0	0
1080/2:Delamination/Spall/Patched Area	ft	12	0	0	100	12	0	0	0	0
Notes:Severe concrete deterioration both headwall and near wing corners - see photos - 9/23/2019										
1090/2:Exposed Rebar	ft	3	0	0	100	3	0	0	0	0
Notes:Both headwalls see photos. - 9/23/2019										
1120/2:Efflorescence/Rust Staining	ft	10	0	0	100	10	0	0	0	0
Notes:Throughout culvert, worse at southeast corner south barrel. - 9/23/2019										
1130/2:Cracking (RC and Other)	ft	9	0	0	0	0	100	9	0	0
Notes:Vertical cracks throughout. - 9/23/2019										
1190/2:Abrasion(PSC/RC)	ft	2	0	0	0	0	100	2	0	0
Notes:Both headwalls - see photos. - 9/23/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Vertical cracks, spalling at wing corners with exposed rebar. Some spalling with minor section loss near floor along all walls. - 9/23/2019

Alert Code 1: Vegetation buildup of 1' to 2' blocking flow thru the north barrel - west side. Severe concrete deterioration with some exposed rebar to both headwalls & ends of center wall. Vertical and horizontal cracks in walls and roof with some seepage. - 9/23/2019

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SEC 409

Structure Number: 18-120-17.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	MEKINOCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01819 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 SOUTH OF HONEYFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	14.597	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 57' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 28' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	614044.2 5312495.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	62 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	30 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	35 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1966 106 Yr Reconstructed	2005	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	390 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	18.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	40.4 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	40.4 Ft.	212 Structure Load Rated	08/29/2016
52 Deck Width	40.7 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-120-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	764	100	764	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	289	100	289	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
110/2:Re Conc Opn Girder/Beam	ft	59	100	59	0	0	0	0	0	0
115/1:Pre Conc Stringer	ft	124	100	124	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	94	78	73	22	21	0	0	0	0
1130/3:Cracking (RC and Other)	ft	6	0	0	100	6	0	0	0	0
Notes:Minor vertical and horizontal cracks both abutments. - 9/3/2019										
1190/3:Abrasion(PSC/RC)	ft	15	0	0	100	15	0	0	0	0
Notes:Minor honeycombing both abutments w/some visible section loss. - 9/3/2019										
330/1:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: In 2005 the county widened both abutments and new wings. One tri t-beam and one quad t-beam added to each side. New w-beam guardrail and posts in 2005. Channel erosion north bank west of structure. Minor vertical and horizontal cracks in both abutments. Honeycombed concrete at waterline of both abutments with some minor visible section loss. Tree branch lodged across channel west side of structure - see photo. - 9/3/2019

Alert Code 1: Riprap displaced both abutments. Both footings exposed. - 9/3/2019

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Structure Number: 18-121-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	67.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GILBY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST GILBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 05' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 26' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	615484.0 5327014.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 40 72 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 24 43 Tons
208 Dk Overburden	29 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1961 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	4 Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	19 Ft.	90 Date of Last Inspection	November 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.0 Ft.	Underwater	N
48 Length of Max Span	26 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	1 48 05/22/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	19.4 Ft.	212 Structure Load Rated	12/03/2015
52 Deck Width	20.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Nefstead
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-121-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	603	97	584	3	19	0	0	0	0
1090/1:Exposed Rebar	sq.ft	4	0	0	100	4	0	0	0	0
Notes:Spall area underside of deck with exposed rebar - 11/25/2019										
1130/1:Cracking (RC and Other)	sq.ft	15	0	0	100	15	0	0	0	0
Notes:Various cracking underside of Bridge Deck. - 11/25/2019										
107/2:Steel Opn Girder/Beam	ft	259	0	0	100	259	0	0	0	0
1000/2:Corrosion	ft	259	0	0	100	259	0	0	0	0
Notes:Rusting to all Girders. See Photo. - 11/25/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	60	60	40	40	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	60	60	40	40	0	0
Notes:Areas of limited to no coating causing no effectiveness. - 11/25/2019										
215/3:Re Conc Abutment	ft	52	31	16	67	35	2	1	0	0
1130/3:Cracking (RC and Other)	ft	10	0	0	90	9	10	1	0	0
Notes:Vertical cracking to both Abutments. Coded on South Abutment with large vertical crack. See Photo, - 11/25/2019										
4000/3:Settlement	ft	26	0	0	100	26	0	0	0	0
Notes:Inward movement on top with outward movement causing lean to South Abutment. See Alert code 2 for measurements. - 11/25/2019										
331/1:Re Conc Bridge Railing	ft	59	90	53	10	6	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:Spalling to West Outside Face of Curb. See Photo. - 11/25/2019										
1090/1:Exposed Rebar	ft	3	0	0	100	3	0	0	0	0
Notes:Spalling with exposed rebar at outside face of West Curb. See photo. - 11/25/2019										
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/09/2009 - South abutment leans in 1" in 4', north abutment leans in 2.75" in 4' measured @ center. South abutment moved in 3.5". North abutment moved in 7" in 2009, 6.25" in 2007. [] NBI Remarks: Minor longitudinal cracking underside of deck. Narrow bridge advance warning signs at each end. Exposed footing both abutments with scour 1' below top of footing. South abutment leans in 1" in 4', measured at center. Spall area underside of deck with exposed rebar. Channel cleanout west of structure in 2011. North BEM Damaged and Misaligned. Inspection incomplete due to High Water. See Photo. 10/16/2019. Inspection completed 11/25/2019. - 11/25/2019

Alert Code 1: Vertical cracks in both abutments, one in north abutment open to 1 1/4" and faulted approximately 1 1/4" and one in south abutment open to 1/4" with no faulting. South abutment moved in 3 1/2", no change from last inspection north abutment moved in 7", no change in 2013. North abutment bows in 2" - 3" @ the vertical crack. No Change in abutment movement to North or South - 11/2019. - 11/25/2019

Alert Code 2: North abutment leans in 3 3/4" in 4' measured at center 2 3/4" last inspection and 2 1/4" prior to that. No lean measurements in 2011 due to high water. No change in lean in 2013. Continued movement in 2015. 10/2017 - No change in lean in 2017 and 2019. - 11/25/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-121-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	MEKINOCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 8 SOUTH GILBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 57' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 27' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	614503.9 5313175.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 46 82 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2002 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	August 05, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.5 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/26/2018
	29.5 Ft.	213 Federal Aid Project Number	BRIDGE #121-16
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-121-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	400	100	400	0	0	0	0	0	0
206/2:Timber Column	each	14	71	10	29	4	0	0	0	0
1170/2:Split/Delamination (Timber)	each	4	0	0	100	4	0	0	0	0
Notes:Piles 1, 2, 3 & 6 at the west abutment split at the top from inward movement of the west abutment - see photos. - 8/5/2019										
216/2:Timber Abutment	ft	64	50	32	50	32	0	0	0	0
1900/2:Distortion	ft	32	0	0	100	32	0	0	0	0
Notes:Minor inward movement at the top of the west abutment causing piles 1,2,3& 6 to split at the back portion. See photo. - 8/5/2019										
235/2:Timber Pier Cap	ft	64	50	32	50	32	0	0	0	0
1900/2:Distortion	ft	32	0	0	100	32	0	0	0	0
Notes:West abutment cap tilting away slightly causing 4 pile to split at the top. - 8/5/2019										
330/1:Metal Bridge Railing	ft	108	100	108	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Minor inward movement of the west abutment causing 4 piles to split at the top. - 8/5/2019										
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Some minor settlement of the west end slope protection. - 8/5/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb. Channel bank erosion both sides of structure. 8/2015 - West abutment slope protection settled and displaced. - 8/5/2019

Alert Code 1: Inward movement of the west abutment caused piles 1, 2, 3 & 6 to split at the top & open to 1". Top backwall plank, west abutment tilting away from inward movement. West abutment cap only sitting on 60% - 70% of abutment piles & tilting away slightly. - 8/5/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-121-16.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	MEKINOCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 8 SOUTH GILBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 57' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 27' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	615666.7 5313699.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 52 93 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 31 56 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1962 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	November 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	30 Ft.	Other Special	N
49 Structure Length	63.98 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	212 Structure Load Rated	03/26/2018
52 Deck Width	24.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-121-16.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,582	100	1,582	0	0	0	0	0	0
110/2:Re Conc Opn Girder/Beam	ft	246	100	246	0	0	0	0	0	0
205/3:Re Conc Column	each	2	100	2	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	16	100	16	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	52	94	49	6	3	0	0	0	0
1130/3:Cracking (RC and Other)	ft	9	67	6	33	3	0	0	0	0
Notes:Minor Vertical cracking to both abutments. See Photo. - 11/25/2019										
331/1:Re Conc Bridge Railing	ft	128	100	128	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Riprap placed at southwest wing area to stop erosion near structure. Poor horizontal roadway alignment. Sharp curve advance warning sign on south end only. Conduit attached to outside of west rail.
 10/2017 - Channel flows through south span. Sediment Buildup in North Span. Inspection Incomplete due to high Water. 10/24/2019. Inspection Completed 11/25/2019. - 11/25/2019

Alert Code 1: Poor channel alignment with channel moving laterally to the south with severe channel bank erosion both sides of structure. 10/2015 - Tree debris lodged against center pier west side. - 11/25/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-121-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	CHESTER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HAZEN BROOK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 2 SOUTH ARVILLA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 53' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 27' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	615768.1 5304788.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 49 89 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 29 53 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	0 Tons
27 Yr Built	1964 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.0 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	24.20 Ft.	218 Channel Profile	1 48 05/19/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/30/2016
	25.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-121-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	636	100	636	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	347	100	347	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
111/2:Timber Open Girder	ft	109	100	109	0	0	0	0	0	0
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	60	100	60	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	48	100	48	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	48	100	48	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Old timber piling in channel along south abutment. Poor channel alignment from the west and east. 7/23/2016 - In 2016 county replaced the timber deck, timber girders, abutment caps, timber curb, posts and w-beam rail. Placed riprap at both abutments. 5/2017 - Scour hole under structure 20' x 60' x 1.5' deep. - 11/4/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-122-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	JOHNSTOWN TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 3 NORTH JOHNSTOWN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 11' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 25' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	616887.8 5338871.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 24 44 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	25 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1919 106 Yr Reconstructed	1999	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	6 Equal Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	10 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	-1.00	71 Waterway Adequacy	7 Above Minimum
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	6 Equal Min Criteria
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	18 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	October 24, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
47 Total Horizontal Clearance	24.9 Ft.	Fracture Critical	N
48 Length of Max Span	22 Ft.	Underwater	N
49 Structure Length	24.93 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	218 Channel Profile	1 48 05/22/2017
	0.7 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	207 Transporter Erector Routes and Sites	-1
52 Deck Width	26.2 Ft.	212 Structure Load Rated	07/11/2017
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Nefstead, Fischer
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-122-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	624	95	594	5	30	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	30	0	0	100	30	0	0	0	0
Notes:Minor decay to underside of deck planks. - 10/24/2019										
107/2:Steel Opn Girder/Beam	ft	374	80	299	16	60	4	15	0	0
1000/2:Corrosion	ft	75	0	0	80	60	20	15	0	0
Notes:Rusting to all girders. The bottom flange of girders #7 and #8 at the north abutment have section loss of between 30% and 50%. See Alert Code 2. - 10/24/2019										
515/2:Steel Protective Coating	sq.ft	100	85	85	10	10	5	5	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	85	85	10	10	5	5	0	0
Notes:Loss of effectiveness to girders. - 10/24/2019										
111/2:Timber Open Girder	ft	125	92	115	8	10	0	0	0	0
1140/2:Decay/Section Loss	ft	10	0	0	100	10	0	0	0	0
Notes:Minor decay to interior girders near south abutment. - 10/24/2019										
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	52	90	47	4	2	6	3	0	0
1160/3:Crack (Timber)	ft	3	0	0	0	0	100	3	0	0
Notes:Cracking south abutment back wall plank. - 10/24/2019										
1170/3:Split/Delamination (Timber)	ft	2	0	0	100	2	0	0	0	0
Notes:Cracking south abutment back wall plank. - 10/24/2019										
235/2:Timber Pier Cap	ft	56	88	49	13	7	0	0	0	0
1170/2:Split/Delamination (Timber)	ft	7	0	0	100	7	0	0	0	0
Notes:Timber cap split at SE Corner. See photo. - 10/24/2019										
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Most steel girders are exhibiting signs of minor section loss to the lower flanges. Some cracking of south abutment backwall planks. Old piling in channel. Some minor rotting underside of deck. 9/2015 - Roadway filtration under bottom back wall plank north abutment. - 10/24/2019

Alert Code 1: Scour hole under structure, 30' x 30' x 1.0' deep. - 10/24/2019

Alert Code 2: The bottom flange of girders #7 and #8 at the north abutment have section loss of between 30% and 50%. - 10/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-122-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	75.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GILBY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 NORTH GILBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 05' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 25' 40.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	617097.4 5326912.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	tion modified to be greater than the standard HL 93 design live load)
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 16 30 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 9 18 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	30 Tons
Age and Service		Appraisal	
27 Yr Built	2008 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	40 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 22, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.9 Ft.	Other Special	N
48 Length of Max Span	33 Ft.	218 Channel Profile	1 48 05/22/2017
49 Structure Length	36.09 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	02/28/2014
51 Bridge Rdwy Width - Curb to Curb	28.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-122-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,071	100	1,071	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	625	100	625	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
111/2:Timber Open Girder	ft	132	100	132	0	0	0	0	0	0
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	68	100	68	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	68	100	68	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: New structure in 2008. Posted Signs observed at 30 Tons both side of Structure. - 10/22/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-122-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	MEKINOCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 8 SOUTH GILBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 58' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 25' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	617250.1 5313912.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 28 52 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 31 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1961 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	19 Ft.	90 Date of Last Inspection	October 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	58 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/26/2018
	25.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-122-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	518	100	518	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	56	96	54	4	2	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Spalling to SW Corner of South Abutment. - 10/24/2019										
1130/2:Cracking (RC and Other)	ft	4	100	4	0	0	0	0	0	0
Notes:Cracking Near SW Corner. - 10/24/2019										
330/1:Metal Bridge Railing	ft	121	100	121	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	121	100	121	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Crack at southwest wing corner with spalling at top. Minor vertical cracks in abutments. Three spalled concrete posts nears SW Corner. Channel bank erosion both sides of structure. Southeast ditch erosion where it enters the channel near SE wing. Both outside girders sagging 1" - 2" near center span. - 10/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-123-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	JOHNSTOWN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST JOHNSTOWN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 09' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 24' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	618581.8 5334338.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 35 64 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 21 39 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1959 106 Yr Reconstructed	1992	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT	2019	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	September 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.5 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/22/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.5 Ft.	212 Structure Load Rated	07/11/2017
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-123-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	743	89	664	9	69	1	10	0	0
1140/1:Decay/Section Loss	sq.ft	14	0	0	29	4	71	10	0	0
Notes:Section loss to various deck planks. Damage to South Bridge end Deck Plank. - 9/26/2019										
1180/1:Abrasion	sq.ft	65	0	0	100	65	0	0	0	0
Notes:Wear to various deck planks. See Photo. - 9/26/2019										
107/2:Steel Opn Girder/Beam	ft	773	81	623	19	150	0	0	0	0
1000/2:Corrosion	ft	150	0	0	100	150	0	0	0	0
Notes:Rusting to underside bottom flange and webs to various girders. - 9/26/2019										
515/2:Steel Protective Coating	sq.ft	100	75	75	25	25	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	75	75	25	25	0	0	0	0
Notes:Minor areas with loss of effectiveness. - 9/26/2019										
111/2:Timber Open Girder	ft	121	100	121	0	0	0	0	0	0
1140/2:Decay/Section Loss	ft	121	100	121	0	0	0	0	0	0
Notes:Minor molding to all Timber Girders. See Photo. - 9/26/2019										
206/2:Timber Column	each	18	100	18	0	0	0	0	0	0
1140/2:Decay/Section Loss	each	6	100	6	0	0	0	0	0	0
Notes:Minor section los to Columns 2, 3, 7 at South Abutment and 5,6, 8 at North Abutment. See Photo, - 9/26/2019										
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	49	98	48	2	1	0	0	0	0
7000/1:Damage	ft	1	0	0	100	1	0	0	0	0
Notes:Minor damage to West Rail Section. - 9/26/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
4000/1:Settlement	each	1	100	1	0	0	0	0	0	0
Notes:Minor settlement to slope protection along SW Corner. - 9/26/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Vehicle damage to south end deck plank. 9/2015 - Slope protection displaced SW corner south abutment. 9/5/2017 - Channel bank erosion both banks east of structure. Volunteer tree Growth SW Wing. See Photo. - 9/26/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-123-04.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	60.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	JOHNSTOWN TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 8 Service R	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST JOHNSTOWN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 09' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 24' 60.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	617771.3 5334322.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 19 35 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 14 26 Tons
208 Dk Overburden	1 None	70 Bridge Posting	4 0.1-9.9%below
Age and Service		209 Posted in "Tons"	32 Tons
27 Yr Built	1954 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	2 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	0 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	November 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	27 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	1 48 05/22/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	04/19/2018
	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-123-04.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	689	100	686	0	3	0	0	0	0
1150/1:Check/Shake	sq.ft	3	0	0	100	3	0	0	0	0
Notes:Minor checking to North end of Bridge Deck. - 11/25/2019										
111/2:Timber Open Girder	ft	374	99	371	1	3	0	0	0	0
1150/2:Check/Shake	ft	3	0	0	100	3	0	0	0	0
Notes:Minor check/shake to west outside Girder from Ice Impact. See Photo. - 11/25/2019										
215/2:Re Conc Abutment	ft	49	0	0	100	49	0	0	0	0
4000/2:Settlement	ft	49	0	0	100	49	0	0	0	0
Notes:Refer to Alert Code 2. Lean to both abutments. North abutment inward movement at top and outward movement at bottom. South Abutment outward movement at top and inward movement at bottom. - 11/25/2019										
332/1:Timb Bridge Railing	ft	56	88	49	13	7	0	0	0	0
1150/1:Check/Shake	ft	7	0	0	100	7	0	0	0	0
Notes:NW Corner of Curb. - 11/25/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	3	100	3	0	0	0	0	0	0

Remarks: NBI Remarks: No railing. Top plank damage at the SW wing. Spalling under beams south abutment. Timber wing added @ the NE corner in 2013. Approximately 2" gap between 5 north end deck planks exposing timber girders - See photo. Ice impact damage to center I-Beam brace. Inspection incomplete due to High Water. See Photo. 10/24/2019. Inspection Completed 11/25/2019. - 11/25/2019

Alert Code 1: Timber Beam 5 from the East split/checked in a 3' area mid-span. - 11/25/2019

Alert Code 2: Bottom of south abutment moving inward. South abutment leans away 5" in 4' measured @ center, a change from 4" in 4' previously. North abutment leans in 5.25" in 4' measured @ center, a change from 4" in 4' previous inspection. Continuous movements observed in 2015. 10/2017 - No change in lean. 11/2019 - No Change in Lean at Both Abutments. - 11/25/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-123-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	68.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	GILBY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST GILBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 04' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 24' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	618716.1 5326748.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 25 46 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 12 22 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1960 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	4 Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT 2019	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	November 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	18.7 Ft.	Underwater	N
48 Length of Max Span	33 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	1 48 05/25/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	18.7 Ft.	212 Structure Load Rated	08/29/2016
52 Deck Width	20.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-123-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	721	93	667	8	54	0	0	0	0
1090/1:Exposed Rebar	sq.ft	4	0	0	100	4	0	0	0	0
Notes:Spall under bridge deck with exposed reinforcing steel approximatley 2' x 2'. - 11/25/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	50	0	0	100	50	0	0	0	0
Notes:Wear to surface of bridge deck. - 11/25/2019										
107/2:Steel Opn Girder/Beam	ft	325	0	0	0	0	100	325	0	0
1000/2:Corrosion	ft	325	0	0	0	0	100	325	0	0
Notes:Rusting to all Steel Girders. See Photo. - 11/25/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	70	70	30	30
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	70	70	30	30
Notes:Loss of coating. No Effectiveness. - 11/25/2019										
215/3:Re Conc Abutment	ft	43	37	16	54	23	9	4	0	0
1080/3:Delamination/Spall/Patched Area	ft	4	0	0	0	0	100	4	0	0
Notes:Spalling near NW Corner of North Abutment. See Photo. - 11/25/2019										
1120/3:Efflorescence/Rust Staining	ft	2	0	0	100	2	0	0	0	0
Notes:Cracking with seepage and efflorescence near NW Corner. See photo. - 11/25/2019										
4000/3:Settlement	ft	21	0	0	100	21	0	0	0	0
Notes:Inward moving at the top and outward at the bottom causing lean. Refer to Alert ode 1 for measurements. - 11/25/2019										
330/1:Metal Bridge Railing	ft	36	0	0	0	0	100	36	0	0
1000/1:Corrosion	ft	36	0	0	0	0	100	36	0	0
Notes:Rusting to West railing. See photo, - 11/25/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:No coating. Loss of effectiveness. - 11/25/2019										
331/1:Re Conc Bridge Railing	ft	72	100	72	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	15	100	15	0	0	0	0	0	0
Notes:Vertical cracking to both curbs. - 11/25/2019										
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/27/2005 - No change in movement measurements. [NBI Remarks: Poor vertical roadway alignment. East railing removed. Concrete deterioration to lower portion of both north wings with up to 1" section loss at water line. Some minor alligator cracking with seepage and efflorescence northwest wing corner & abutment. 10/2017 - Roadway embankment settling at all corners. Inspection incomplete due to Roadway Impassible. See Photo. 10/22/2019. Inspection completed 11/25/2019. - 11/25/2019

Alert Code 1: Scour hole under structure 3' x 25' x 80' long. South abutment moved in 7 1/2", no change in 2009. Spall under bridge deck with exposed reinforcing steel approximatley 2' x 2'. Scaling of both abutments from water line and down. South abutment leans in 1 1/4" in 4' measured at center. No lean measurements in 2013. No change in lean in 2015 or 2017 and 2019. - 11/25/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-123-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	MEKINOCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01812 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST OF MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	11.897	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 00' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 24' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	618649.3 5318113.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 38 68 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 41 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	105 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	10 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 24, 2019
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	32.2 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 05/24/2017
49 Structure Length	25.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	12/06/2017
51 Bridge Rdwy Width - Curb to Curb	30.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-123-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	256	100	256	0	0	0	0	0	0
206/3:Timber Column	each	18	100	18	0	0	0	0	0	0
216/2:Timber Abutment	ft	69	100	69	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	69	100	69	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	52	100	52	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	52	100	52	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Old concrete abutment and piles in channel under bridge. Minor rotting of wing piling. Roadway embankment filtering thru under bottom abutment plank at southwest corner of west abutment. Vegetation in channel, both sides of structure. Poor channel alignment to the North. - 10/24/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-123-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	76.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	MEKINOCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 6 SOUTH GILBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 59' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 24' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	618842.6 5316116.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 24 43 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 11 21 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1949 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	November 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	36 Ft.	Other Special	N
49 Structure Length	39.04 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	212 Structure Load Rated	08/29/2016
52 Deck Width	24.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-123-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	936	79	736	21	200	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	200	0	0	100	200	0	0	0	0
Notes:Wear on the deck. No Photo. Overburden. - 11/25/2019										
107/2:Steel Opn Girder/Beam	ft	505	51	255	50	250	0	0	0	0
1000/2:Corrosion	ft	250	0	0	100	250	0	0	0	0
Notes:Rusting to all Girders. See photo. - 11/25/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Limited coating causing limited effectiveness. - 11/25/2019										
215/3:Re Conc Abutment	ft	62	36	22	61	38	3	2	0	0
1080/3:Delamination/Spall/Patched Area	ft	6	0	0	83	5	17	1	0	0
Notes:Spalling to lower portion of North Abutment near water line and Wing with up to +5" of section loss. See Photo. - 11/25/2019										
1090/3:Exposed Rebar	ft	1	0	0	0	0	100	1	0	0
Notes:Spalling with exposed rebar to lower portion of North Abutment an NW Wing Corner. - 11/25/2019										
1130/3:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
Notes:Vertical Cracking to North Abutment. Typical to both abutments. - 11/25/2019										
4000/3:Settlement	ft	31	0	0	100	31	0	0	0	0
Notes:lateral Inward movement at South Abutment. See Alert Code 1 for measurements. - 11/25/2019										
330/1:Metal Bridge Railing	ft	79	100	79	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	79	90	71	10	8	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	8	0	0	100	8	0	0	0	0
Notes:Spalling to West Curb. See Photo. - 11/25/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [] NBI Remarks: Poor horizontal roadway alignment. Vertical cracks in both abutments. Both abutment footings exposed. Channel bank erosion both banks both sides of structure. Poor channel alignment from the west. Up to 5" of section loss bottom of north abutment where it meets the wing lower portion. See Photo. Inspection incomplete due to High Water. See Photo. 10/24/2019. Inspection completed 11/25/2019. - 11/25/2019

Alert Code 1: South abutment moved in 8", 7" in 2007. No change in 2013. South abutment moved in 9" in 2015. Measured at center a change from 8" in 2013. 10/2017 - No additional movement of south abutment in 2017 and 2019. - 11/25/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-123-15.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	MEKINOCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 7 SOUTH GILBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 58' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 25' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	618141.3 5314883.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 28 52 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 31 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1961 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	September 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	58 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	04/19/2018
	25.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-123-15.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	541	85	461	15	80	0	0	0	0
1110/2:Cracking (PSC)	ft	80	0	0	100	80	0	0	0	0
Notes:Minor longitudinal cracks to center of Concrete Channel Beams on the to surface. - 9/24/2019										
206/3:Timber Column	each	18	83	15	17	3	0	0	0	0
1180/3:Abrasion	each	3	0	0	100	3	0	0	0	0
Notes:Wear to lower portion fo Columns 4, 5, and 6 on the East Abutment. See Photo. - 9/24/2019										
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	121	100	121	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	121	98	118	3	3	0	0	0	0
1090/1:Exposed Rebar	ft	3	0	0	100	3	0	0	0	0
Notes:Spalling with exposed rebar to top of barrier posts. See Photo. - 9/24/2019										
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/1:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Slope Protection settling to both Abutments. - 9/24/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Old piling in channel under structure. Channel bank erosion both banks both sides of structure. Minor embankment erosion behind northwest wing. Minor section loss to bottom of 3 center pile in east abutment. Some minor sag in outside girders. 9/2015 - Slope protection settling worse at west abutment. Settled to East Abutment. 9/2017 - Minor longitudinal cracks center of most beams. Spalling to top of Concrete Bridge Railing Curb Posts. See Photo. - 9/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-124-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	JOHNSTOWN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST JOHNSTOWN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 09' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 23' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	620192.2 5334372.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 22 40 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 13 24 Tons
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1952 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	August 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.9 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	30.00 Ft.	218 Channel Profile	1 48 05/22/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	25.1 Ft.	212 Structure Load Rated	09/11/2015
52 Deck Width	26.3 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-124-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	789	98	770	2	19	0	0	0	0
1170/1:Split/Delamination (Timber)	sq.ft	19	0	0	100	19	0	0	0	0
Notes:Minor areas throughout the deck. - 8/9/2019										
107/2:Steel Opn Girder/Beam	ft	168	100	168	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
111/2:Timber Open Girder	ft	112	96	107	0	0	5	5	0	0
1160/2:Crack (Timber)	ft	5	0	0	0	0	100	5	0	0
Notes:cracked near the south abutment for a length of 5' - see photo - 8/9/2019										
206/3:Timber Column	each	14	86	12	14	2	0	0	0	0
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes:Piles# 5 & 6 at the north abutment split under the cap and open 1/4" and 1/2". See phot of pile #6. - 8/9/2019										
216/3:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	65	94	61	0	0	6	4	0	0
1180/2:Abrasion	ft	4	0	0	0	0	100	4	0	0
Notes:Ice impact damage to west end at the north abutment - see photo. - 8/9/2019										
330/1:Metal Bridge Railing	ft	60	100	60	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	60	100	60	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
7000/3:Damage	each	1	0	0	100	1	0	0	0	0
Notes:Minor fire damage to the northwest wing - see photo. - 8/9/2019										

Remarks: 8/20/2015 - Piles #5 & 6 at the north abutment split under the cap and open 1/4" to 1/2". Loose rock riprap placed through the channel. Timber girder #7 cracked near the south abutment for a length of 5'. Three new south abutment backwall planks in 2015. 19 deck planks replaced from south to north in 2015. 24' of timber curb replaced on each side in 2015. Channel bank erosion both banks just east of structure - see photo. - 8/9/2019

Alert Code 1: Fire damage to northwest wing, Northwest corner underside of deck, cap, west outside girder & pile #1 north abutment. Ice impact damage to west end north abutment cap. - 8/9/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-124-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	77.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	MEKINOCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01812 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST OF MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	12.198	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 00' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 23' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	619355.3 5318137.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 21 38 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 12 23 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1955 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	105 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	49 Ft.	Other Special	N
49 Structure Length	50.85 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	07/11/2017
	24.0 Ft.	213 Federal Aid Project Number	CS-715(3)
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, inspector1
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-124-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,335	77	1,029	23	306	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/24/2019. - 11/21/2019										
1120/1:Efflorescence/Rust Staining	sq.ft	6	0	0	100	6	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/24/2019.Minor efflorescence underside of deck near east abutment. - 11/21/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	300	0	0	100	300	0	0	0	0
Notes:Wear to surface of deck. - 11/21/2019										
107/2:Steel Opn Girder/Beam	ft	194	100	194	0	0	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/24/2019. - 11/21/2019										
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/24/2019. - 11/21/2019										
215/3:Re Conc Abutment	ft	56	89	50	11	6	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/24/2019. - 11/21/2019										
1130/3:Cracking (RC and Other)	ft	6	0	0	100	6	0	0	0	0
Notes:Minor diagonal crack northeast corner east abutment - see photo. - 11/21/2019										
330/1:Metal Bridge Railing	ft	102	100	102	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/24/2019. - 11/21/2019										
331/1:Re Conc Bridge Railing	ft	102	100	102	0	0	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/24/2019. - 11/21/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/24/2019. - 11/21/2019										

Remarks: NBI Remarks: Old piling in channel under structure. Channel bank erosion both banks both sides of structure. Minor cracks in both abutments. Inspection incomplete due to High Water. See Photo. 10/24/2019. Inspection completed 11/21/2019. - 11/21/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-124-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	CHESTER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST EMERADO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 55' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 24' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	619537.7 5308487.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 38 68 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 41 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1981 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	200 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 29, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.2 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 05/19/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/09/2017
51 Bridge Rdwy Width - Curb to Curb	27.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-124-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	226	100	226	0	0	0	0	0	0
206/3:Timber Column	each	16	100	16	0	0	0	0	0	0
216/3:Timber Abutment	ft	66	0	0	0	0	100	66	0	0
1140/3:Decay/Section Loss	ft	66	0	0	0	0	100	66	0	0
Notes:Section loss to back timber planks at both abutments near water line. See Photo. - 10/29/2019										
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	49	98	48	0	0	2	1	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	0	0	100	1	0	0
Notes:Spall to NE Corner of Curb. See Photo. - 10/29/2019										
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railing. Old concrete abutment in channel near east abutment. Vegetation in Channel. - 10/29/2019

Alert Code 1: Erosion at all Wings with a depth of 2' of undermining to NE Wing. See Photo. - 10/29/2019

Alert Code 2: Rotting of lower backwall planks-both abutments with approximately 50 - 70% section loss to some of the planks. - 10/29/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-125-04.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	LEVANT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01825 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN 19	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST OF JOHNSTOWN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	27.894	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 09' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 21' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	621733.1 5334383.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 31 56 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 34 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	145 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	10 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 26, 2019
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	30.2 Ft.	Other Special	N
48 Length of Max Span	29 Ft.	218 Channel Profile	1 48 05/22/2017
49 Structure Length	32.15 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/09/2017
51 Bridge Rdwy Width - Curb to Curb	30.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-125-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	318	91	288	7	22	3	8	0	0
1080/2:Delamination/Spall/Patched Area	ft	5	0	0	60	3	40	2	0	0
Notes:Spalling to tops of Beams 6 and 7. See Photo. - 9/26/2019										
1090/2:Exposed Rebar	ft	10	0	0	40	4	60	6	0	0
Notes:Spalling with exposed rebar to underside of 3 channel beams and at beams 2, 7, 8, 9, 10 at Both Abutments. See Photos and Alert Code 2. - 9/26/2019										
1130/2:Cracking (RC and Other)	ft	15	0	0	100	15	0	0	0	0
Notes:Diagonal cracks near both abutments to girders 2, 7, 8, 9 and 10. See Photos and Alert Code 2. - 9/26/2019										
206/2:Timber Column	each	18	94	17	6	1	0	0	0	0
1170/2:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes:Split Pile 6 open 3/8" at South Abutment. - 9/26/2019										
216/2:Timber Abutment	ft	69	100	69	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	69	100	69	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	62	100	62	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor ice damage to lower portion center rail posts west side. Minor spalling to bottoms of 3 channel beams exposing rusted reinforcing steel. 9/2017 - Minor spall area top of beams 6 & 7. - 9/26/2019

Alert Code 2: Diagonal longitudinal cracks, spalling and exposed rebar to bottom of beams 2, 7, 8 & 10 near the south cap and beams 4, 7, 8 & 9 at the north cap. See Photos. - 9/26/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-125-12.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	LAKEVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01825 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH OF MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	19.496	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 21' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	622006.4 5320598.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	2 Concrete Precast Panel	64 Oper. Rating	HS 53 95 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 27 50 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1983 106 Yr Reconstructed -1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	145 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	1 0 1 1
19 Bypass, Detour Length	2 Miles	113 Scour Critical	7 Countermeasures
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 24, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	30.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	29.9 Ft.	Other Special	N
48 Length of Max Span	71 Ft.	218 Channel Profile	1 48 05/24/2017
49 Structure Length	75.13 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	04/19/2018
51 Bridge Rdwy Width - Curb to Curb	30.2 Ft.	213 Federal Aid Project Number	CBRS-1825(52)
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 18-125-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,314	90	2,083	10	231	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	231	0	0	100	231	0	0	0	0
Notes:Wear to surface of bridge deck. See Photo. - 9/24/2019										
104/2:Pre Clsd Box Girder	ft	282	100	282	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	72	100	72	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	151	60	91	40	60	0	0	0	0
1000/1:Corrosion	ft	60	0	0	100	60	0	0	0	0
Notes:Rusting to various areas of both railings. - 9/24/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: One cracked guardrail post southwest corner. Channel bank erosion both banks up and downstream. Tree debris in channel down stream. See photo. Volunteer tree growth along North Abutment's NW and NE Corner. - 9/24/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-125-13.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	MEDORA CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 23' 07.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	620399.2 5319625.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 35 65 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1966 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	September 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	32.15 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	212 Structure Load Rated	04/19/2018
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-125-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	220	98	216	0	0	2	4	0	0
1080/2:Delamination/Spall/Patched Area	ft	4	0	0	0	0	100	4	0	0
Notes:Spalling to center of middle Quad Tee Beam section. No Photo taken due to Scout Hole under structure. - 9/24/2019										
206/2:Timber Column	each	17	100	17	0	0	0	0	0	0
216/2:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	66	100	66	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	50	50	50	50	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	100	100	0	0	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
Notes:Scour Under Structure 15' x 20' x 3.5' Deep. See Photo. - 9/24/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb. Wing piling starting to rot . Old concrete abutment and timber pile in channel under structure. Trees and vegetation in channel north side and vegetation in channel South Side. - 9/24/2019

Alert Code 2: Scour hole under structure, 15' x 20' x 3.5' deep. - 9/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-125-13.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	MEKINOCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 23' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	620530.4 5319576.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 32 58 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 15 28 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1993 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	September 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.6 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	45.93 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	212 Structure Load Rated	08/19/2013
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	BRIDGE # 125-13.1
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 18-125-13.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	322	100	322	0	0	0	0	0	0
206/2:Timber Column	each	18	89	16	11	2	0	0	0	0
1170/2:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes:Columns #3 and #4 open 1/4" to 3/8" at East Abutment. See Photo. - 9/24/2019										
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	92	100	92	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Old structure piling in channel south of structure. Channel bank erosion both banks both sides of structure. No curb. 9/2015 - Tree debris in channel upstream and downstream. Poor Channel Alignment from the south. Vegetation obstructing East End Bridge End Marker. See Photo. - 9/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-125-13.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	51.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	MEKINOCK TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 SOUTH MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 00' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 23' 07.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	620412.8 5319125.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 26 47 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 19 36 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	14 Tons
Age and Service		Appraisal	
27 Yr Built	1919 106 Yr Reconstructed	2019	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT	2019	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	July 29, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.5 Ft.	Underwater	N
48 Length of Max Span	34 Ft.	Other Special	N
49 Structure Length	33.50 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	27.5 Ft.	212 Structure Load Rated	09/25/2019
52 Deck Width	28.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-125-13.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,001	100	1,001	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	358	30	108	56	200	14	50	0	0
1000/2:Corrosion	ft	358	30	108	56	200	14	50	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	70	70	30	30	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	70	70	30	30	0	0
111/2:Timber Open Girder	ft	108	100	108	0	0	0	0	0	0
206/3:Timber Column	each	15	87	13	0	0	7	1	7	1
1140/3:Decay/Section Loss	each	1	0	0	0	0	0	0	100	1
1160/3:Crack (Timber)	each	1	0	0	0	0	100	1	0	0
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8398/1:Slope Protection	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Wing planking pulling away from piling-northeast corner. Channel bank erosion both banks both sides of structure. Ice impact damage to northwest wing planks. Some rusting and pitting to the bottom flange most beams. Old can & minor tree debris under structure. 9/2015 - Channel bank erosion near SW wing. Some minor roadway filtration under bottom wall plank south abutment. 2019: County Forces replaced Timber Deck Girders and Metal railing, Repaired Pile #1 North Abutment, replaced and repaired rip rap both Abutments. New Top Plank all 4 wings. - 7/29/2019

Alert Code 2: Ice impact damage to NW corner abutment pile # 1. Pile 7 north abutment cracked near bottom. - 7/29/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-125-13.4

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	77.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	MEKINOCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	WEST EDGE MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 21' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	622027.8 5319541.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 18 32 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 10 20 Tons
208 Dk Overburden	1 None	70 Bridge Posting	4 0.1-9.9%below
Age and Service		209 Posted in "Tons"	32 Tons
27 Yr Built	1970 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	8.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	September 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	35 Ft.	Other Special	N
49 Structure Length	38.06 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.9 Ft.	212 Structure Load Rated	07/11/2017
52 Deck Width	26.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-125-13.4

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	990	90	892	8	80	0	0	2	18
1140/1:Decay/Section Loss	sq.ft	18	0	0	0	0	0	0	100	18
Notes:Section loss to Deck Planks at various areas of Deck. See Photo. - 9/24/2019										
1160/1:Crack (Timber)	sq.ft	30	0	0	100	30	0	0	0	0
Notes:Transverse cracking in various Timber Deck Planks. See Photo. - 9/24/2019										
1180/1:Abrasion	sq.ft	50	0	0	100	50	0	0	0	0
Notes:Wear to Deck Planks. See Photo. - 9/24/2019										
107/2:Steel Opn Girder/Beam	ft	262	43	112	57	150	0	0	0	0
1000/2:Corrosion	ft	150	0	0	100	150	0	0	0	0
Notes:Corrosion to all Girders. See Photo. - 9/24/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
111/2:Timber Open Girder	ft	151	100	151	0	0	0	0	0	0
206/3:Timber Column	each	14	93	13	7	1	0	0	0	0
1170/3:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes:Pile #7 South Abutment. Split and open 3/4". See Photo. - 9/24/2019										
216/3:Timber Abutment	ft	62	100	62	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	75	100	75	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb. Rusty girders. Old piling in channel under structure. West rail posts beginning to rot. Utility conduit attached to east side of guardrail. Channel bank erosion both banks both sides of structure. Embankment settling behind abutment all 4 corners. Minor deck plank cracking, wear, and section loss. 9/2015 - Railing replaced both sides in 2015. Pile 7 south abutment split at top and open 3/4". 9/2017 - Areas of decay to some timber deck planks. Bridge now posted at 32 Tons. - 9/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-125-13.5

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	MEKINOCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01825 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	CITY OF MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	18.696	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 21' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	622009.7 5320225.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	60 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	36 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	35 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	875 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 24, 2019
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	30.2 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 05/24/2017
49 Structure Length	25.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	08/09/2017
51 Bridge Rdwy Width - Curb to Curb	30.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	31.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-125-13.5

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	259	100	259	0	0	0	0	0	0
206/2:Timber Column	each	16	100	16	0	0	0	0	0	0
216/2:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	72	100	72	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	52	100	52	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co	sq.ft	35	100	35	0	0	0	0	0	0
Notes:Galvanized coating beginning to peel along East Railing. See Photo. - 9/24/2019										
331/1:Re Conc Bridge Railing	ft	52	98	51	2	1	0	0	0	0
1090/1:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:Spall with exposed rebar to SE Corner of Concrete Curb. See Photo. - 9/24/2019										
332/2:Timb Bridge Railing	ft	66	100	66	0	0	0	0	0	0
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Scour under structure 30' x 34' x 4' Deep. See Photo and Alert Code 2. - 9/24/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Old piling in channel along north abutment. Poor Channel Alignment from the East. - 9/24/2019**Alert Code 1:** Vegetation, sediment buildup west side blocking flow thru channel. - 9/24/2019**Alert Code 2:** Large scour hole under structure, 30' x 34' x 4' deep beginning to slightly undermine the south abutment near center of abutment. - 9/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-125-13.6

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	MEKINOCK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01825 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	SOUTH OF MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	18.296	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 21' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	622027.8 5319541.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 32 58 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	35 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1965 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	875 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	September 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.2 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	30.5 Ft.	212 Structure Load Rated	08/09/2017
52 Deck Width	31.8 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-125-13.6

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	256	98	252	2	4	0	0	0	0
1010/2:Cracking	ft	130	100	130	0	0	0	0	0	0
Notes:Hairline cracks near both abutments approx 5' outwards. See Photo. - 9/24/2019										
1090/2:Exposed Rebar	ft	4	0	0	100	4	0	0	0	0
Notes:Spalling with exposed rebar to Channel Beams 1 and 2 near South Abutment. See Photo. - 9/24/2019										
206/2:Timber Column	each	18	100	18	0	0	0	0	0	0
216/2:Timber Abutment	ft	72	100	72	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	72	100	72	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	52	100	52	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	52	92	48	8	4	0	0	0	0
1090/1:Exposed Rebar	ft	4	0	0	100	4	0	0	0	0
Notes:Spalling with exposed rebar to NW Corner and SE Corner of Curb. See Photo. - 9/24/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Spalling at bottom west outside beam exposing reinforcing steel. Fine hairline cracks at 12" spacing starting at 5 ft from each abutment on all beams. South abutment cap bows away 2" - 3" @ center.
9/2015 - Spalling with exposed rebar at SE and NW ends of curb. - 9/24/2019

Alert Code 1: 9/2017 -Vegetation Buildup of 2 - 3' thru channel east side of structure blocking flow. Scour under structure 24' x 30' x 2' Deep. See Photo. - 9/24/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-125-28.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	79.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	PLEASANT VIEW TOWNSH	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01825 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 SOUTH OF EMERADO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.599	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 47' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 21' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	622351.2 5294967.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	70 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	42 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	312 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1967 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	635 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	11.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	12 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 26, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	26.2 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 05/15/2017
49 Structure Length	33.14 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	08/29/2016
51 Bridge Rdwy Width - Curb to Curb	26.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-125-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	893	100	890	0	3	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	3	0	0	100	3	0	0	0	0
Notes:Spalling to east side edge of deck slab near North Abutment. See Photo. - 9/26/2019										
107/2:Steel Opn Girder/Beam	ft	627	48	300	52	327	0	0	0	0
1000/2:Corrosion	ft	327	0	0	100	327	0	0	0	0
Notes:All Girders showing rusty conditions throughout. See Photo. - 9/26/2019										
515/2:Steel Protective Coating	sq.ft	100	40	40	60	60	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	40	40	60	60	0	0	0	0
Notes:Loss of effectiveness to coating of steel girders. - 9/26/2019										
206/3:Timber Column	each	14	43	6	50	7	7	1	0	0
1140/3:Decay/Section Loss	each	8	0	0	88	7	13	1	0	0
Notes:CS 3: Column 4 South Abutment Decay Section Loss. CS 2 Decay at water line to Columns 1-7 at North Abutment. - 9/26/2019										
216/3:Timber Abutment	ft	62	95	59	5	3	0	0	0	0
1170/3:Split/Delamination (Timber)	ft	3	0	0	100	3	0	0	0	0
Notes:Decay Section Loss to South Abutment. See Photo. - 9/26/2019										
235/2:Timber Pier Cap	ft	62	87	54	7	4	7	4	0	0
Notes:Crack to North Cap. See Photo. Open 1/5" to 7/8". - 9/26/2019										
1160/2:Crack (Timber)	ft	8	0	0	50	4	50	4	0	0
Notes:Crack through North Cap beginning at east End. See Photo. - 9/26/2019										
330/1:Metal Bridge Railing	ft	69	100	69	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
1140/3:Decay/Section Loss	each	2	0	0	100	2	0	0	0	0
Notes:decay to SE and NE Wings. See Photo. Mainly to the Piling. - 9/26/2019										

Remarks: NBI Remarks: Rusty girders. Minor rotting of abutment plank. Tree brush in channel east side. Rotted curb both sides. Slight sag in all girders. Utility cable attached to west side guardrail posts. 9/18/2017 - 2" mill and overlay in 2017. Poor channel alignment from the west. Vegetation in channel. Timber Curb Removed. New Timber Posts to West Railing. - 9/26/2019

Alert Code 1: Rotting of North abutment piling 1-7 and 4 in South Abutment. Rotting to wing piling NE and SE. Scour hole under bridge 40 x 27 x 2.5' - 9/26/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-126-04.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	70.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LEVANT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST JOHNSTOWN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 09' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	623356.8 5334372.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 14 26 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 8 16 Tons
208 Dk Overburden	1 None	70 Bridge Posting	2 20.0-29.9%below
Age and Service		209 Posted in "Tons"	24 Tons
27 Yr Built	1946 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	September 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.3 Ft.	Underwater	N
48 Length of Max Span	30 Ft.	Other Special	N
49 Structure Length	33.14 Ft.	218 Channel Profile	1 48 05/25/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	212 Structure Load Rated	07/11/2017
52 Deck Width	25.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 18-126-04.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	858	93	798	7	60	0	0	0	0
Notes:Wear to deck planks. - 9/26/2019										
1180/1:Abrasion	sq.ft	60	0	0	100	60	0	0	0	0
Notes:Wear of the deck planks. - 9/26/2019										
107/2:Steel Opn Girder/Beam	ft	328	39	128	61	200	0	0	0	0
1000/2:Corrosion	ft	200	0	0	100	200	0	0	0	0
Notes:All Girders Rusty. See Photo. - 9/26/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	30	30	70	70
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	30	30	70	70
111/2:Timber Open Girder	ft	131	50	65	20	26	31	40	0	0
1160/2:Crack (Timber)	ft	40	0	0	0	0	100	40	0	0
Notes:East outside girder cracked. See Photo. - 9/26/2019										
7000/2:Damage	ft	26	0	0	100	26	0	0	0	0
Notes:West outside girder split and leaning from ice damage. See Photo. - 9/26/2019										
206/3:Timber Column	each	14	93	13	7	1	0	0	0	0
1170/3:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes:Pile #4 south abutment split at top and open to 3/4". - 9/26/2019										
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	66	100	66	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	66	100	66	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Rusty stringers. Top plank NE & NW wings missing. 9/2015 - Pile #4 south abutment split at top and open to 3/4". - 9/26/2019

Alert Code 1: West outside girder split and leaning from ice damage. East outside girder cracked. - 9/26/2019

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SEC 409

Structure Number: 18-126-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LAKEVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST GILBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 04' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	623544.4 5326302.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 22 40 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 13 24 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1967 106 Yr Reconstructed	2015	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	6 Equal Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	20 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	2019	71 Waterway Adequacy	7 Above Minimum
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	7 Above Min Criteria
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	14 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	August 08, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	27.2 Ft.	Fracture Critical	N
48 Length of Max Span	20 Ft.	Underwater	N
49 Structure Length	22.97 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.5 Ft Rt-Side	218 Channel Profile	1 48 05/25/2017
	0.5 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb		207 Transporter Erector Routes and Sites	-1
	27.2 Ft.	212 Structure Load Rated	09/11/2015
52 Deck Width	28.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-126-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	649	100	649	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	180	100	180	0	0	0	0	0	0
111/1:Timber Open Girder	ft	100	100	100	0	0	0	0	0	0
206/2:Timber Column	each	14	100	14	0	0	0	0	0	0
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	63	100	63	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	46	100	46	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railing. 8/20/2015 - New caps, girders, deck and timber curb in 2015. Structure ripped through channel. Heavy vegetation in channel both sides. - 8/8/2019

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Structure Number: 18-126-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LAKEVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 1 EAST MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	623148.7 5319884.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	21 Gravel/Dir	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1959 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.9 Ft.	212 Structure Load Rated	04/19/2018
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-126-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	453	100	453	0	0	0	0	0	0
206/2:Timber Column	each	16	100	16	0	0	0	0	0	0
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	91	60	9	6	0	0	0	0
1150/2:Check/Shake	ft	6	0	0	100	6	0	0	0	0
330/1:Metal Bridge Railing	ft	98	100	98	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	98	100	98	0	0	0	0	0	0
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Slope Protection along East Abutment beginning to settle and displace. - 11/26/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Channel bank erosion both banks both sides of structure. Minor slope protection settling @ the east abutment. Old Piling in Channel. - 11/26/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-126-12.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	53.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LAKEVILLE TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 2 EAST MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	623611.5 5320418.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 15 28 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 6 11 Tons
208 Dk Overburden	1 None	70 Bridge Posting	2 20.0-29.9%below
Age and Service		209 Posted in "Tons"	27 Tons
27 Yr Built	1913 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	November 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	Y 24 11/25/2019
47 Total Horizontal Clearance	24.9 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	41.99 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	24.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-126-12.1

[illegible]

Structure Number: 18-126-12.1

Remarks: Refurbished in 2004. NBI Remarks: Rusty lower truss members and stringers. Rotting piling all wings. County rehabilitated bridge in 2004. Abutment piling were straightened and splice kits added to all split piling both abutments-see photo. New timber bridge planks and caps installed. Riprap placed at both abutments. Additional steel stringers added to structure. Channel bank erosion upstream and downstream. Piles 3 & 4 north abutment cracked near the top & pile #3 south abutment cracked @ the top & near water line. 10/2015 - Both slope protections have settled and displaced. Inspection incomplete due to High Water. 10/23/2019. Inspection completed 11/25/2019. - 11/25/2019

Alert Code 1: UBent E-E section right side from U1 to L1' minor. - 11/25/2019

Alert Code 2: Stringers 5, 7, 13, 15 and 16 are severely rusted with areas of the top flange showing section loss of approximately 75%. - 11/25/2019

Fracture Critical: Truss Inspection complete with no additional equipment used. Inspection incomplete due to High Water. See Photo. 10/23/2019. Truss inspection completed with no additional equipment used. 11/25/2019. - 11/25/2019

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SEC 409

Structure Number: 18-126-12.2

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	61.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LAKEVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 1 EAST MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	623303.6 5319886.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 29 53 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 14 26 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1964 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.6 Ft.	Underwater	N
48 Length of Max Span	36 Ft.	Other Special	N
49 Structure Length	38.06 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.6 Ft.	212 Structure Load Rated	08/29/2016
52 Deck Width	26.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-126-12.2

[illegible]

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-126-12.2

Remarks: 01/09/2008 - Ice damage to both fascia girders. [] NBI Remarks: No curb. Vertical crack center of east abutment open to 3/4". Channel bank erosion up & downstream. Rotted wing pile - northwest wing. One broken wing pile and top 2 planks at the southeast wing. Horizontal cracking in the SE corner timber abutment cap. Some rotting of timber cap SW corner. 10/2015 - 1 to 2" gap between timber deck and concrete beams. Inspection incomplete due to High Water. See Photo. 10/23/2019. Inspection Completed 11/26/2019. - 11/26/2019

Alert Code 1: Erosion hole behind NE corner east abutment 1' x 1' x 2.5' deep. South beam spalled out bottom of beam center of span exposing reinforcing steel and tension cable. - 11/26/2019

Alert Code 2: Severe concrete deterioration lower portion both abutments, with up to 8" - 10" of section loss lower portion of east abutment. Reinforcing steel exposed on east abutment. Approximately 1/2 of concrete section thickness missing. 10/2015 - SE corner timber cap crushing. Rotting of the NE corner timber cap. - 11/26/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-126-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	BLOOMING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01812 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST OF MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	14.697	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 00' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	623222.7 5318240.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 31 56 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 34 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	38 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	305 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 24, 2019
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	32.2 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 05/24/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/09/2017
51 Bridge Rdwy Width - Curb to Curb	30.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-126-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	226	100	225	0	1	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Spalling to underside of Channel Beam #8 approx. 5' from East Abutment. See Photo. - 9/24/2019										
1130/2:Cracking (RC and Other)	ft	25	100	25	0	0	0	0	0	0
Notes:Cracking to mid Span Outside girders. See Photo. - 9/24/2019										
206/2:Timber Column	each	16	100	16	0	0	0	0	0	0
216/2:Timber Abutment	ft	72	100	72	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	72	96	69	0	0	4	3	0	0
1140/2:Decay/Section Loss	ft	3	0	0	0	0	100	3	0	0
Notes:Rotting North End of West Cap. See Photo. - 9/24/2019										
330/1:Metal Bridge Railing	ft	52	100	52	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	52	100	52	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Rotting of north end west cap. Minor vertical cracks midspan outside girders. 9/2015 - 2" HBP overlay in 2015. Vegetation in Channel Both sides. Minor displacement of Rip Rap along West Abutment. - 9/24/2019

Alert Code 1: Scour Hole Under Structure 10' x 15' x 2' Deep. See Photo. - 9/24/2019

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SEC 409

Structure Number: 18-126-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	OAKVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SALT WATER COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST EMERADO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 55' 17.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	623509.1 5308877.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 45 82 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1994 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	19 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 29, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/16/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	04/20/2018
	27.6 Ft.	213 Federal Aid Project Number	COUNTY PROJ. 126-19
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Structure Number: 18-126-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	174	100	174	0	0	0	0	0	0
206/2:Timber Column	each	18	100	18	0	0	0	0	0	0
216/2:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb. Volunteer Tree Growth near SE Wing. - 10/29/2019

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Structure Number: 18-126-19.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	OAKVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST EMERADO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 55' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 21' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	623100.0 5308580.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1968 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	90 30 Year of ADT 2013	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	October 10, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 9X9X50' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Structure Number: 18-126-19.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	98	0	0	100	98	0	0	0	0
1900/3:Distortion	ft	98	0	0	100	98	0	0	0	0
4000/1:Settlement	each	1	100	1	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Horizontal cracks in outside walls. Vertical cracks in center wall. Cracks in parapets with seepage. Center construction joint has been mortared shut. Approximately 2" of lateral movement at center construction joint. Concrete headwall center of both barrels 3.5' wide x 1.0' high. 10/2015 - Abrasion north end center wall and outside walls near the floor.

Alert Code 1: Scour hole just off north end of culvert - 30' x 100' x 1.0' deep.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-126-34.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City		37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 5 EAST OF HATTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 42' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	624062.8 5284683.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 44 80 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 26 48 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed	2015	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	80 30 Year of ADT	2019	6 Equal Minimum
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	September 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.0 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	24.30 Ft.	218 Channel Profile	1 48 05/22/2017
50 Curb/Sidewalk Widths	0.2 Ft Rt-Side	Chaining Date	None
	0.2 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	25.0 Ft.	212 Structure Load Rated	01/04/2016
52 Deck Width	26.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-126-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	632	100	632	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	348	100	348	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
111/2:Timber Open Girder	ft	109	100	109	0	0	0	0	0	0
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	56	98	55	2	1	0	0	0	0
1140/2:Decay/Section Loss	ft	1	0	0	100	1	0	0	0	0
Notes:Section loss to NW corner of North Abutment. See Photo. - 9/26/2019										
330/1:Metal Bridge Railing	ft	48	100	48	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
7000/3:Damage	each	1	0	0	100	1	0	0	0	0
Notes:Fire Damage to NW wing. See Photo. - 9/26/2019										

Remarks: 09/2015 - In 2015 county forces added riprap to both abutments,replaced girders,timber deck,timber curb,railing and posts. Poor Channel alignment from the east. Ditch runs along section road. - 9/26/2019

Alert Code 1: 5/2017 - Scour hole under structure 20' x 15' x 1' deep. - 9/26/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-127-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	80.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LEVANT TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 2 NORTH JOHNSTOWN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 10' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	624752.6 5337646.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 26 46 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 15 28 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2012 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	November 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.1 Ft.	Underwater	N
48 Length of Max Span	30 Ft.	Other Special	N
49 Structure Length	64.00 Ft.	218 Channel Profile	1 48 05/25/2017
50 Curb/Sidewalk Widths	0.5 Ft Rt-Side	Chaining Date	None
	0.5 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	04/12/2013
	25.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 18-127-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,678	77	1,288	23	385	0	5	0	0
1160/1:Crack (Timber)	sq.ft	30	0	0	83	25	17	5	0	0
Notes:Various timber planks cracking. See Photo. - 11/4/2019										
1180/1:Abrasion	sq.ft	360	0	0	100	360	0	0	0	0
Notes:Wheel paths of deck planks showing wear. See Photo. - 11/4/2019										
107/2:Steel Opn Girder/Beam	ft	598	100	598	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
111/2:Timber Open Girder	ft	299	87	259	13	40	0	0	0	0
1170/2:Split/Delamination (Timber)	ft	40	0	0	100	40	0	0	0	0
Notes:Minor split to Timber Nailer. - 11/4/2019										
206/3:Timber Column	each	21	76	16	0	0	24	5	0	0
1170/3:Split/Delamination (Timber)	each	5	0	0	0	0	100	5	0	0
Notes:Pile 2-6 West Abutment split at top. - 11/4/2019										
216/3:Timber Abutment	ft	56	50	28	0	0	50	28	0	0
Notes:West abutment tilting back. - 11/4/2019										
1900/3:Distortion	ft	28	0	0	0	0	100	28	0	0
Notes:West Abutment tilting back. See Photo. - 11/4/2019										
235/2:Timber Pier Cap	ft	93	58	54	0	0	39	36	3	3
1170/2:Split/Delamination (Timber)	ft	5	0	0	0	0	100	5	0	0
Notes:Split to end of East Abutment cap near SE Corner. See Photo. - 11/4/2019										
1900/2:Distortion	ft	34	0	0	0	0	91	31	9	3
Notes:West Cap tilting back. See Photo. - 11/4/2019										
330/1:Metal Bridge Railing	ft	129	100	129	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	75	75	25	25	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	25	0	0	100	25	0	0	0	0
Notes:Peeling of catching to both railing. - 11/4/2019										
332/1:Timb Bridge Railing	ft	129	94	121	6	8	0	0	0	0
1020/1:Connection	ft	8	0	0	100	8	0	0	0	0
Notes:Portion of North curb loosen and not nailed down. - 11/4/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: South end of east abutment cap cracked & split. West abutment cap tilting away & not setting on the front portion of all piles with cap setting on approximately only 50% of piles 4 & 5. - 11/4/2019

Alert Code 1: Piles 2-6 west abutment split on the back side under cap from inward movement. Pile #5 east abutment only supporting 30% of cap. Top plank west abutment tilting away. - 11/4/2019

Alert Code 2: West abutment cap tilting away & not setting on the front portion of all piles with cap setting on approximately 40-50% of piles 4 & 5. - 11/4/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-127-03.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	83.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	LEVANT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01802 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN NO. 12	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST OF JOHNSTOWN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	26.994	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 09' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	624969.2 5334417.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	2 Concrete Precast Panel	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 35 64 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 17 32 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1975 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	230 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	October 22, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	55 Ft.	Other Special	N
49 Structure Length	113.85 Ft.	218 Channel Profile	1 48 05/25/2017
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	212 Structure Load Rated	04/20/2018
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	ER-118(6)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-127-03.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,638	100	3,638	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	30	100	30	0	0	0	0	0	0
Notes:Minor cracking to top of deck throughout. No Photo taken due to CS 1 cracks. - 10/22/2019										
104/2:Pre Clsd Box Girder	ft	443	100	443	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	50	15	0	0	50	15	0	0
1080/3:Delamination/Spall/Patched Area	ft	15	0	0	0	0	100	15	0	0
Notes:Spalling along waterline of Pier. - 10/22/2019										
215/2:Re Conc Abutment	ft	66	96	63	5	3	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Minor spall to NW Corner or West abutment. - 10/22/2019										
1130/2:Cracking (RC and Other)	ft	10	100	10	0	0	0	0	0	0
Notes:Vertical cracking to both abutments. See Photo. - 10/22/2019										
4000/2:Settlement	ft	1	0	0	100	1	0	0	0	0
Notes:Inward lean to Bottom of West Abutment with 2 1/4" in 4'. No additional movement observed in 2019. - 10/22/2019										
330/1:Metal Bridge Railing	ft	226	100	226	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	226	97	218	4	8	0	0	0	0
1130/1:Cracking (RC and Other)	ft	8	0	0	100	8	0	0	0	0
Notes:Vertical cracks at all 4 corners. See Photo. - 10/22/2019										
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
Notes:Slope Protection settling causing undermining of both abutments. - 10/22/2019										
4000/1:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Slope protection settling and displaced causing undermining of both abutments. See Alert code 1. See photo. - 10/22/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/21/2005 - West abutment leans in 2" in 4' measured at center. 01/04/2007 - West abutment now leans 2 1/4" in 4 ft. measured at center. NBI Remarks: Spalling with rebar exposed on center diaphragm. Cracking on abutment end posts and top of NW wing. Deteriorating concrete at waterline and below of center pier with section loss up to 1/2". Riprap blocks flow thru channel north side. - 10/22/2019

Alert Code 1: Large bow outward of the east abutment of 6 1/8" measured under the north outside beam with stringline. West abutment bowed outward 2" measured at center. West abutment leans away 2 1/4" in 4', no change from last inspection. Some minor undermining of the east abutment with 3 exposed piles & west abutment with 1 exposed pile. No change in 2015.10/2017 - West abutment leans away 2 1/2" in 4', a change from 2 1/4" in 4' previously. No Change in Lean to East Abutment in 2019. - 10/22/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-127-04.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	59.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LEVANT TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 1 SOUTH JOHNSTOWN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 08' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	624968.9 5332798.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 9 17 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 6 11 Tons
208 Dk Overburden	1 None	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	17 Tons
27 Yr Built	1951 106 Yr Reconstructed	2002	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	3 Intolerable - Correct
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	30 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	-1.00	71 Waterway Adequacy	8 Equal Desirable
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	7 Above Min Criteria
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	12 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	November 26, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	24.9 Ft.	Fracture Critical	N
48 Length of Max Span	22 Ft.	Underwater	N
49 Structure Length	82.02 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	218 Channel Profile	1 48 05/25/2017
	0.3 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	207 Transporter Erector Routes and Sites	-1
52 Deck Width	26.2 Ft.	212 Structure Load Rated	01/30/2003
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Nefstead, Fischer
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 18-127-04.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	2,131	95	2,031	5	100	0	0	0	0
1150/1:Check/Shake	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Minor check/shake to top surface of deck near the wheel paths. - 11/26/2019										
107/2:Steel Opn Girder/Beam	ft	305	38	117	33	100	29	88	0	0
1000/2:Corrosion	ft	188	0	0	53	100	47	88	0	0
Notes:Minor Rusting to portions of the webs and underside of bottom flange. - 11/26/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	50	50	0	0	50	50
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	50	50	0	0	50	50
Notes:Areas of not coating causing no effectiveness. - 11/26/2019										
111/2:Timber Open Girder	ft	869	98	849	2	20	0	0	0	0
1160/2:Crack (Timber)	ft	20	0	0	100	20	0	0	0	0
Notes:Minor Crack in girder #2 from the south in span #4 near pier #4. - 11/26/2019										
206/3:Timber Column	each	32	91	29	6	2	3	1	0	0
1140/3:Decay/Section Loss	each	1	0	0	0	0	100	1	0	0
Notes:Pile #3 from the north at pier #3 20% rotted at waterline. - 11/26/2019										
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes:Pile #3 from the south at pier #4 split and open to 1/2" at the top. Pile #7 at Abutment 5 Split at Top and open 1/2" See Photo. - 11/26/2019										
212/1:Timber Pier Wall	ft	89	100	89	0	0	0	0	0	0
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	161	97	156	3	5	0	0	0	0
1150/2:Check/Shake	ft	5	0	0	100	5	0	0	0	0
Notes:Minor check shake to North end of Pier 4 Cap. - 11/26/2019										
330/1:Metal Bridge Railing	ft	164	100	164	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	164	100	164	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: County forces replaced all timber caps, timber deck, timber curb, timber girders and added additional wf-beams-2002. County removed all damaged protection planks and added metal cutting edges to both ends of protection planks on piers 2, 3 and 4. New w-beam railing added. Some rusty steel girders. Minor ice damage to protective planks on south side of pier some rotting to bottom of all pier #4 columns. Scour hole 2' deep near pier #3. Minor crack in girder #2 from the south in span #4 near pier #4. Pile #3 from the south at pier #4 split and open to 1/2" at the top. 10/2015 - Posted Dead End on west end of bridge. Rotted Wing Pile and SW Wing. See Photo. Inspection incomplete due to roadway impassible with wet and slippery conditions to a minimum maintenance road. See Photo. 10/22/2019. Inspection Completed 11/26/2019. - 11/26/2019

Alert Code 1: Pile #3 from the north at pier #3 20% rotted at waterline. - 11/26/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-127-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LEVANT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LEGAL DRAIN NO. 12	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 2 NORTH GILBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 06' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625027.8 5329589.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 39 70 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 23 42 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2000 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	September 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	44.95 Ft.	218 Channel Profile	1 48 05/25/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	212 Structure Load Rated	04/20/2018
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-127-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	315	100	315	0	0	0	0	0	0
206/1:Timber Column	each	14	100	14	0	0	0	0	0	0
216/1:Timber Abutment	ft	60	100	60	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	68	100	68	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	92	100	92	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1140/1:Decay/Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Rotting pile to NW Wing. See photo. - 9/24/2019										

Remarks: NBI Remarks: Channel bank erosion both sides of structure. One rotted wing pile northwest wing. Ditch meets with channel at SW Corner. - 9/24/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-127-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	66.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LAKEVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 1 NORTH GILBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 05' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625082.0 5327947.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 12 23 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 7 14 Tons
208 Dk Overburden	1 None	70 Bridge Posting	1 30.0-39.9%below
Age and Service		209 Posted in "Tons"	23 Tons
27 Yr Built	1969 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	2 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	September 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.3 Ft.	Underwater	N
48 Length of Max Span	34 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	1 48 05/25/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	07/11/2017
	25.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-127-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	926	89	821	7	60	5	45	0	0
1150/1:Check/Shake	sq.ft	15	0	0	0	0	100	15	0	0
Notes:Check shakes to West end of Structure. See Photo. - 9/26/2019										
1160/1:Crack (Timber)	sq.ft	30	0	0	0	0	100	30	0	0
Notes:Crack to various deck planks. See Photo. - 9/26/2019										
1180/1:Abrasion	sq.ft	60	0	0	100	60	0	0	0	0
Notes:Wear to top surface of Various deck planks. - 9/26/2019										
107/2:Steel Opn Girder/Beam	ft	289	0	0	100	289	0	0	0	0
1000/2:Corrosion	ft	289	0	0	100	289	0	0	0	0
Notes:Rusty Girder with minor pitting to bottom flange. See Photo. - 9/26/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Effectiveness to coating. - 9/26/2019										
111/2:Timber Open Girder	ft	144	75	108	0	0	0	0	25	36
1140/2:Decay/Section Loss	ft	36	0	0	0	0	0	0	100	36
Notes:Decay to South Outside Girder with 6' of Girder showing section loss completely through. - 9/26/2019										
206/2:Timber Column	each	14	100	14	0	0	0	0	0	0
216/2:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railing. Rusty girders with minor pitting to underside bottom flange. Channel bank erosion both banks both sides of structure. Some minor vehicle damage to west end deck plank. New Posted Signs on both ends of Structure. 23 Tons. Partial Channel Clean-out South of Structure. Channel meets with a East-West Channel South of Structure. - 9/26/2019

Alert Code 1: South outside timber girder rotting near center, with section loss completely thru the girder in a 6' area. - 9/26/2019

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SEC 409

Structure Number: 18-127-08.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	LAKEVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01808 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	7 WEST OF MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	25.894	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 04' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625118.3 5326340.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	555 30 Year of ADT 2013	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	16.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 04, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBRS-1808(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10'X8'X50' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Structure Number: 18-127-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	151	86	130	14	21	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor cracks in headwalls & inside walls. One spall area north headwall with exposed rebar.
10/2017 - 6" of buildup in all barrels.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-127-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LAKEVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 1 SOUTH GILBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 03' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625173.8 5324721.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 28 50 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 16 30 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1969 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	September 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.9 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 05/25/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	212 Structure Load Rated	07/11/2017
52 Deck Width	26.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-127-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	807	85	687	15	120	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	120	0	0	100	120	0	0	0	0
Notes:Rotting of deck planks underside and section loss to top of dec planks. See Photo. - 9/24/2019										
107/2:Steel Opn Girder/Beam	ft	335	70	235	30	100	0	0	0	0
1000/2:Corrosion	ft	100	0	0	100	100	0	0	0	0
Notes:Corrosion to various girders. See Photo. - 9/24/2019										
515/2:Steel Protective Coating	sq.ft	100	65	65	35	35	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	35	0	0	100	35	0	0	0	0
Notes:Loss of coating causing rusting to various girders. See Photo. - 9/24/2019										
111/2:Timber Open Girder	ft	92	100	92	0	0	0	0	0	0
206/2:Timber Column	each	14	100	14	0	0	0	0	0	0
216/2:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	56	54	30	0	0	46	26	0	0
1900/2:Distortion	ft	26	0	0	0	0	100	26	0	0
Notes:Crushing of Timber Cap from Girder #2 to Girder #12. See Photo. - 9/24/2019										
332/1:Timb Bridge Railing	ft	62	92	57	0	0	8	5	0	0
1140/1:Decay/Section Loss	ft	5	0	0	0	0	100	5	0	0
Notes:Section loss to NW Corner and near SW Corner.. See Photo. - 9/24/2019										
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Scour Under Structure. See Alert Code 1. - 9/24/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railing. Minor rotting of deck plank underside of deck. Minor Section Loss to Top Surface of Deck Planks. Rusting to steel grinders and various areas. Channel cleanout north of structure in 2013. - 9/24/2019

Alert Code 1: Scour hole center of channel under structure 10' x 20' x 2.5' deep. - 9/24/2019

Alert Code 2: West abutment cap crushing under beams 2 - 12. - 9/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-127-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	79.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LAKEVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 2 SOUTH GILBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 02' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625191.3 5323115.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 15 27 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 11 21 Tons
208 Dk Overburden	1 None	70 Bridge Posting	2 20.0-29.9%below
Age and Service		209 Posted in "Tons"	32 Tons
27 Yr Built	1954 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	September 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	26 Ft.	Other Special	N
49 Structure Length	27.89 Ft.	218 Channel Profile	1 48 05/25/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	07/11/2017
	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-127-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	678	100	678	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	282	0	0	99	279	1	3	0	0
1000/2:Corrosion	ft	282	0	0	99	279	1	3	0	0
Notes:Rusting to all Girders. Section loss to Girder #11 and Girder #2. See Photos. - 9/24/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
111/2:Timber Open Girder	ft	85	100	85	0	0	0	0	0	0
206/3:Timber Column	each	12	100	12	0	0	0	0	0	0
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	49	96	47	4	2	0	0	0	0
1140/2:Decay/Section Loss	ft	2	0	0	100	2	0	0	0	0
Notes:Section Loss to SE Corner of East Abutment Cap. See Photo. - 9/24/2019										
332/1:Timb Bridge Railing	ft	56	71	40	29	16	0	0	0	0
1140/1:Decay/Section Loss	ft	10	0	0	100	10	0	0	0	0
Notes:Section Loss to South Curb near SE Corner See Photo. - 9/24/2019										
1170/1:Split/Delamination (Timber)	ft	6	0	0	100	6	0	0	0	0
Notes:Split within North Curb approx mid length. See Photo. - 9/24/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railing. Rusty girders. Severe rusting to girder 11 from the north with some section loss, up to 50% to the bottom flange and the top flange at the west abutment. Old abutment piling in channel. Rusting with approximately 40% section loss to girder #2 @ the east abutment. Rotting Piling at NE Wing. See Photo. - 9/24/2019

Alert Code 1: Scour hole under structure 30' x 30' x 2.5' deep. - 9/24/2019

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SEC 409

Structure Number: 18-127-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LAKEVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 3 SOUTH GILBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 02' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625194.1 5322459.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 22 40 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 13 24 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	2013 106 Yr Reconstructed	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	40 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 24, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	25.1 Ft.	Other Special	N
48 Length of Max Span	21 Ft.	218 Channel Profile	1 48 05/25/2017
49 Structure Length	24.00 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.6 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.6 Ft Lt-Side	212 Structure Load Rated	07/12/2017
51 Bridge Rdwy Width - Curb to Curb	25.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 18-127-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	631	100	631	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	381	89	339	0	0	11	42	0	0
1000/2:Corrosion	ft	42	0	0	0	0	100	42	0	0
Notes:Corrosion to Stringer #14 with pitting and section loss to underside bottom flange. See Photo. - 9/24/2019										
515/2:Steel Protective Coating	sq.ft	100	90	90	0	0	10	10	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	90	90	0	0	10	10	0	0
111/2:Timber Open Girder	ft	63	100	63	0	0	0	0	0	0
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	64	100	64	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	48	100	48	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10/15/2013 - Bridge replaced with a steel stringer. Section loss up to 30% bottom flange beam #14. Section loss up to 40% top flange beam #2. Rusting to West Abutment Steel Plate Cap. See Photo. - 9/24/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-127-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	47.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LAKEVILLE TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 2 EAST MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	624622.4 5319890.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 8 16 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 3 6 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	16 Tons
27 Yr Built	1960 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	90 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.3 Ft.	Underwater	N
48 Length of Max Span	42 Ft.	Other Special	N
49 Structure Length	44.95 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	10/21/2013
	24.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-127-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,109	100	1,109	0	0	0	0	0	0
111/2:Timber Open Girder	ft	226	100	226	0	0	0	0	0	0
206/3:Timber Column	each	18	89	16	11	2	0	0	0	0
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes:Split Pile 1 at NE Corner of East Abutment and Pile 9 at the SW Corner of the West Abutment. Split at top and open 1/2". See Photo. - 11/25/2019										
216/3:Timber Abutment	ft	72	100	72	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	72	100	72	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	89	100	89	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb. West bank erosion upstream and downstream. Posted 30 MPH across structure east end only 10/2017 - Channel bank erosion near all wings. Inspection incomplete due to High Water. See Photo. 10/23/2019. Inspection completed 11/25/2019. - 11/25/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-127-13.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BLOOMING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST OF MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 00' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	624876.6 5319479.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 47 85 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 28 51 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	13.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	November 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	76 Ft.	Other Special	N
49 Structure Length	80.05 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	04/20/2018
52 Deck Width	30.2 Ft.	213 Federal Aid Project Number	BRO-18(12)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-127-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	761	100	761	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	161	100	161	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor channel alignment from the west. Sharp curve arrow and 30 mph advance warning signs both ends. Channel bank erosion downstream. Inspection incomplete due to High Water. See Photo. 10/23/2019. Inspection Completed 11/26/2019. - 11/26/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-127-18.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BLOOMING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 2 NORTH EMERADO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 56' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625061.4 5311803.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 37 67 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 41 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1962 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2013	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 17, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	21.0 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	1 48 05/19/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/09/2017
	21.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	23.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-127-18.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	180	89	160	3	6	8	14	0	0
1080/2:Delamination/Spall/Patched Area	ft	6	0	0	100	6	0	0	0	0
Notes: _										
1090/2:Exposed Rebar	ft	14	0	0	0	0	100	14	0	0
Notes: _										
206/3:Timber Column	each	10	0	0	100	10	0	0	0	0
1140/3:Decay/Section Loss	each	10	0	0	100	10	0	0	0	0
Notes: _										
216/3:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1140/3:Decay/Section Loss	ft	49	0	0	100	49	0	0	0	0
234/2:Re Conc Pier Cap	ft	49	96	47	4	2	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes: _										
330/1:Metal Bridge Railing	ft	52	100	52	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	52	94	49	6	3	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes: _										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: Wing piling rotted. Some rotting of abutment piling. Spillway 300 feet west of structure. Bullet damage to BEM's.

Alert Code 1: Spalling with exposed and rusty rebar to the bottom of 4 channel beams.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-127-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	FAIRFIELD TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 8 SOUTH EMERADO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 47' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625443.8 5295081.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 36 65 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 21 39 Tons
208 Dk Overburden	202 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1936 106 Yr Reconstructed	2018	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	7 Above Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	40 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	2013	71 Waterway Adequacy	7 Above Minimum
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	7 Above Min Criteria
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	18 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	July 13, 2018
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
47 Total Horizontal Clearance	27.6 Ft.	Fracture Critical	N
48 Length of Max Span	25 Ft.	Underwater	N
49 Structure Length	27.80 Ft.	Other Special	N
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	218 Channel Profile	1 48 05/15/2017
	1.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb		207 Transporter Erector Routes and Sites	
	25.4 Ft.	212 Structure Load Rated	07/13/2018
52 Deck Width	26.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer,Nefstead
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-127-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	717	100	717	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	417	92	382	1	5	7	30	0	0
1000/2:Corrosion	ft	30	0	0	0	0	100	30	0	0
7000/2:Damage	ft	5	0	0	100	5	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
111/2:Timber Open Girder	ft	83	100	83	0	0	0	0	0	0
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	55	100	55	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor channel alignment from west. No railing. Old concrete abutments in channel under structure. Some pitting to bottom flange most beams. 9/2015 - New timber curb both sides in 2015. 7/2018 - Bridge rehabbed in 2018.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-127-34.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	UNION TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 10 EAST NORTHWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 42' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	624372.8 5284423.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 20 36 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 12 23 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1919 106 Yr Reconstructed	1993	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT	2019	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	September 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.6 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/22/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	26.9 Ft.	212 Structure Load Rated	11/24/2015
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-127-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	667	100	667	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	351	100	351	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Minor loss of coating to areas of Steel Girders. - 9/26/2019										
111/2:Timber Open Girder	ft	125	100	125	0	0	0	0	0	0
206/2:Timber Column	each	14	100	14	0	0	0	0	0	0
216/2:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	95	56	5	3	0	0	0	0
1140/2:Decay/Section Loss	ft	3	0	0	100	3	0	0	0	0
Notes:Decay to SE Corner of Cap at east Abutment. See Photo. - 9/26/2019										
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	49	98	48	2	1	0	0	0	0
1140/1:Decay/Section Loss	ft	1	0	0	100	1	0	0	0	0
Notes:Section loss to NW Corner of Curb. See photo. - 9/26/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
7000/2:Damage	each	1	0	0	100	1	0	0	0	0
Notes:Fire damage tp SW Wing. - 9/26/2019										

Remarks: NBI Remarks: Fire damage to southwest wing, pile and abutment cap. Approximately 1/2" gap between timber cap piling 1, 6, and 7 at West Abutment, and 1" gap at Pile 1 East Abutment. Large amount of vegetation & some tree growth in channel. Existing Piling in channel Along east abutment. No Side Photos taken due to heavy vegetation in channel. - 9/26/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-128-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LAKEVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 2 EAST MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 18' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625909.5 5319911.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 43 79 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 44 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1986 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	100 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 26, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.2 Ft.	Other Special	N
48 Length of Max Span	48 Ft.	218 Channel Profile	1 48 05/24/2017
49 Structure Length	49.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	04/20/2018
51 Bridge Rdwy Width - Curb to Curb	27.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-128-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	351	100	351	0	0	0	0	0	0
206/2:Timber Column	each	16	81	13	13	2	6	1	0	0
1140/2:Decay/Section Loss	each	1	0	0	0	0	100	1	0	0
Notes:Pile 2 East Abutment has 20 % missing near the top under the cap. - 11/26/2019										
1170/2:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes:Pile 5 west abutment split at the top and along the side to 3/8". Pile 1 east abutment split at the top to 1". - 11/26/2019										
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	93	55	7	4	0	0	0	0
1140/2:Decay/Section Loss	ft	4	0	0	100	4	0	0	0	0
Notes:Minor section loss to north end of West Abutment Cap. - 11/26/2019										
330/1:Metal Bridge Railing	ft	98	100	98	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Channel bank erosion up & downstream. No curb. 10/2015 - Pile 5 west abutment split at the top to 3/8" Pile 1 east abutment split at the top to 1". Pile 2 has 20 % missing near the top under the cap. 10/2017 - Old piling in channel near west abutment. Old concrete columns in channel. 4 Channels bolted to Piles 2, 3, 6 and 7 at East and West Abutment. Minor erosion behind NW Wing where in connects to the Concrete Girder. Inspection incomplete due to High Water. See Photo. 10/23/2019. Inspection completed 11/26/2019. - 11/26/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-128-12.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LAKEVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 3 EAST MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 18' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	626102.7 5319913.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 52 95 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 29 53 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1992 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	90 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	November 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	04/20/2018
	27.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-128-12.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	351	100	351	0	0	0	0	0	0
206/2:Timber Column	each	18	100	18	0	0	0	0	0	0
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	93	55	7	4	0	0	0	0
1140/2:Decay/Section Loss	ft	4	0	0	100	4	0	0	0	0
Notes:Section Loss approx. mid length of Cap and West Abutment. See Photo. - 11/26/2019										
330/2:Metal Bridge Railing	ft	98	100	98	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
Notes:Slope Protection settling and displacing along south portion of East Abutment. - 11/26/2019										
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Rip Rap along East Abutment settling and displacing mainly towards South end. - 11/26/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [NBI Remarks: Some channel bank sloughing & erosion upstream & downstream. Minor settlement & displaced riprap both abutments Inspection incomplete due to High Water. See Photo. 10/23/2019. Inspection completed 11/26/2019. - 11/26/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-128-13.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BLOOMING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 18' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	626497.5 5319717.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 31 56 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 34 Tons
208 Dk Overburden 2	Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1968 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.6 Ft.	Underwater	N
48 Length of Max Span	58 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	05/20/2018
	25.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-128-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	541	100	541	0	0	0	0	0	0
206/3:Timber Column	each	20	95	19	5	1	0	0	0	0
7000/3:Damage	each	1	0	0	100	1	0	0	0	0
Notes:Pile #1 South Abutment Ice Damage. See Photo. - 11/26/2019										
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	121	100	121	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	121	100	121	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [NBI Remarks: Channel bank erosion upstream & downstream. 10/2015 - Riprap added at both abutments and near both wings. Embankment repaired near SW wing see photos. Inspection incomplete due to High Water. See Photo. 10/23/2019. Inspection completed 11/26/2019. - 11/26/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-128-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BLOOMING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 1 SOUTH MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 59' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 18' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	626536.9 5317466.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 26 48 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 15 29 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1962 106 Yr Reconstructed	2004	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	6 Equal Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	25 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	-1.00	71 Waterway Adequacy	6 Equal Minimum
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	7 Above Min Criteria
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	16 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	October 23, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	27.6 Ft.	Fracture Critical	N
48 Length of Max Span	23 Ft.	Underwater	N
49 Structure Length	24.93 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	218 Channel Profile	1 48 05/24/2017
	0.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb		207 Transporter Erector Routes and Sites	-1
	27.6 Ft.	212 Structure Load Rated	07/11/2017
52 Deck Width	28.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-128-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	708	100	708	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	452	97	437	0	0	3	15	0	0
1000/2:Corrosion	ft	15	0	0	0	0	100	15	0	0
Notes:Section loss to underside bottom flange to two east outside steel girders with approx. 10-15% section loss. See Photo. - 10/23/2019										
515/2:Steel Protective Coating	sq.ft	100	55	55	0	0	30	30	15	15
3420/2:Peel/Bub/Crack(Stl Protect Co	sq.ft	100	55	55	0	0	30	30	15	15
Notes:Peeling, bull bling to underside of bottom flanges to two east outside girders. - 10/23/2019										
111/2:Timber Open Girder	ft	126	100	126	0	0	0	0	0	0
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	60	100	60	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	57	100	57	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
Notes:Scour under structure 5' x 20' x 1' Deep. See Alert code 1. - 10/23/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 1/5/2006 - County reconstructed in July 2004. New timber deck plank 12 x 4. New timber caps 12 x 12, backed with 12 x 3 T. timber plank. Girders replaced with combination of timber and steel. Riprap added. No curb.
 10/2015 - Minor section loss to bottom flange at 2 east outside w-beams . Some minor paint peeling to all remaining girders. 10/2017 - Channel cleanout west of structure and west ditch south of structure. Vegetation buildup east side of structure. Poor channel alignment from the West - 10/23/2019

Alert Code 1: Scour hole under structure 5' x 20' x 1' deep. - 10/23/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-128-14.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	52.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BLOOMING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 1 SOUTH MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 00' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 18' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	626533.8 5317893.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 18 33 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 11 20 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	4 0.1-9.9%below
Age and Service		209 Posted in "Tons"	32 Tons
27 Yr Built	1962 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.3 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	04/26/2018
	25.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-128-14.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	646	100	646	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	197	0	0	100	197	0	0	0	0
1000/2:Corrosion	ft	197	0	0	100	197	0	0	0	0
Notes:Rusting to all Girders. - 10/23/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of effectiveness. - 10/23/2019										
111/2:Timber Open Girder	ft	394	100	394	0	0	0	0	0	0
206/3:Timber Column	each	14	0	0	71	10	29	4	0	0
1140/3:Decay/Section Loss	each	11	0	0	64	7	36	4	0	0
Notes:All piling to both abutments showing decay near water line. - 10/23/2019										
1170/3:Split/Delamination (Timber)	each	3	0	0	100	3	0	0	0	0
Notes:South Abutment Pile 2 open 1/2", Pile 3 open 1/2" and Pile 6 open 1 1/2". See Photo. - 10/23/2019										
216/3:Timber Abutment	ft	59	0	0	100	59	0	0	0	0
1140/3:Decay/Section Loss	ft	59	0	0	100	59	0	0	0	0
Notes:Rotting to lower portion of both abutments near water line. - 10/23/2019										
235/2:Timber Pier Cap	ft	66	14	9	0	0	50	33	36	24
1160/2:Crack (Timber)	ft	4	0	0	0	0	0	0	100	4
Notes:Cracking east end of North Cap. So Photo. - 10/23/2019										
1900/2:Distortion	ft	53	0	0	0	0	62	33	38	20
Notes:South Timber Cap tilting back to all piles. See Photo. See alert code 2. North cap crushed at mid length for approx. 20'. See Photo. See Alert Code 2. - 10/23/2019										
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	90	90	10	10	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	10	0	0	100	10	0	0	0	0
Notes:Peeling of coating to all ends of railing. - 10/23/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Old piling in center of channel. Poor channel alignment. Pile 2 in south abutment split & open to 1/2" at top. North abutment cap and top backwall planks tilting away. Rusty girders. 10/2017 - Channel cleanout both sides in 2017. Grand Forks County Engineer notified of the condition state of the north timber cap. - 10/23/2019

Alert Code 1: Both abutments rotting with near water line. - 10/23/2019

Alert Code 2: South abutment cap and top backwall planks tilting back with cap only sitting on 40 - 50% of all piles. Rotting of all piling. north abutment cap crushing near center approximately 6' in length. Additional Crushing observed in 2019. Up to Approx. 20' in length. Pile 6 in south abutment split and open to 1 1/2" at top. Pile 3 split and open 1/2" at the top at South Abutment. Cap setting on 30% of pile 3. - 10/23/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-128-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	69.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BLOOMING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 2 EAST EMERADO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 56' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625080.0 5311826.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 37 67 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 41 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1960 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2013	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	October 17, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	20.7 Ft.	Underwater	N
48 Length of Max Span	21 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	1 48 05/19/2017
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/09/2017
	20.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-128-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	177	0	0	0	0	100	177	0	0
1080/2:Delamination/Spall/Patched Area	ft	87	0	0	0	0	100	87	0	0
Notes: _										
1090/2:Exposed Rebar	ft	90	0	0	0	0	100	90	0	0
Notes: _										
206/3:Timber Column	each	10	0	0	100	10	0	0	0	0
1140/3:Decay/Section Loss	each	10	0	0	100	10	0	0	0	0
216/3:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1140/3:Decay/Section Loss	ft	49	0	0	100	49	0	0	0	0
234/2:Re Conc Pier Cap	ft	49	100	49	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	52	100	52	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	52	92	48	4	2	4	2	0	0
1080/1:Delamination/Spall/Patched Area	ft	4	0	0	50	2	50	2	0	0
Notes: _										
8401/3:Wings	each	4	50	2	50	2	0	0	0	0

Remarks: NBI Remarks: Vehicle damage to rail northwest corner. Poor channel alignment. Rotted SE wing piling.

Alert Code 2: All channel beams are spalled on lower portion with exposed rusted reinforcing steel. Minor bump at west end of bridge.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-128-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	OAKVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HAZEN BROOK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 1 NORTH EMERADO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 55' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 18' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	626715.8 5310097.1	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 49 88 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 29 53 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2010 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	November 27, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	30 Ft.	Other Special	N
49 Structure Length	32.00 Ft.	218 Channel Profile	1 48 04/30/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.5 Ft.	212 Structure Load Rated	07/26/2017
52 Deck Width	30.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-128-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	222	100	222	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	71	100	71	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	65	100	65	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: New Structure in 2010 Inspection incomplete due to High Water. See photo. 10/23/2019. Inspection Completed 11/27/2019. - 11/27/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-128-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	FAIRFIELD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 9 SOUTH EMERADO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 47' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 18' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	627065.7 5294620.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Slab		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 41 75 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 30 55 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1968 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	24 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	1 48 05/15/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	04/26/2018
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-128-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	657	86	562	15	95	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	95	0	0	100	95	0	0	0	0
Notes:Section loss and mold to underside of Bridge Deck. See Photo. - 9/26/2019										
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	56	50	28	50	28	0	0	0	0
Notes:South Abutment tilting back. See Photo. - 9/26/2019										
1900/2:Distortion	ft	28	0	0	100	28	0	0	0	0
Notes:South cap tilting back more at west end. See Photo. - 9/26/2019										
330/1:Metal Bridge Railing	ft	52	100	52	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	52	39	20	62	32	0	0	0	0
1150/1:Check/Shake	ft	20	0	0	100	20	0	0	0	0
Notes:Check/Shakes to both timber curb. See Photo. - 9/26/2019										
1180/1:Abrasion	ft	12	0	0	100	12	0	0	0	0
Notes:Wear to both curbs. See Photo. - 9/26/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: SW wing pile rotted. Slight tilt back of south abutment cap - west side. Sediment & vegetation buildup west side of structure. 9/2015 - North abutment cap tilting away slightly. Riprap placed thru channel under structure. - 9/26/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-129-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	82.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	LAKEVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN NO. 2	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST 2 NORTH MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 06' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 17' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	627274.1 5329605.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 20 37 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 12 23 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1975 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 27, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	10.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	25.9 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 05/25/2017
49 Structure Length	25.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	07/11/2017
51 Bridge Rdwy Width - Curb to Curb	26.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-129-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	689	100	689	0	0	0	0	0	0
Notes:Minor molding beginning to occur within underside. See Photo. - 9/27/2019										
107/2:Steel Opn Girder/Beam	ft	262	0	0	100	262	0	0	0	0
1000/2:Corrosion	ft	262	0	0	100	262	0	0	0	0
Notes:Rusting to all Girders. - 9/27/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	90	90	10	10
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	90	90	10	10
111/2:Timber Open Girder	ft	79	96	76	4	3	0	0	0	0
1170/2:Split/Delamination (Timber)	ft	3	0	0	100	3	0	0	0	0
Notes:Split with section loss to SE Corner of South Outside Girder. See Photo. - 9/27/2019										
206/2:Timber Column	each	10	100	10	0	0	0	0	0	0
216/2:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Rusty girders. No curb. No railings. Old Existing Timber Abutment in channel near East Abutment. See Photo. Vegetation in channel both sides Poor Channel Alignment from the South - 9/27/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-129-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	BLOOMING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01812 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 1 SOUTH MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	17.196	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 00' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 17' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	626928.6 5318328.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 28 50 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 31 Tons
208 Dk Overburden	310 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1966 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	305 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	32.2 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/09/2017
	31.8 Ft.	213 Federal Aid Project Number	
52 Deck Width	31.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-129-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	226	99	223	1	3	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	3	0	0	100	3	0	0	0	0
Notes:Cracking with minor seepage and efflorescence mid span of Girder 2. See Photo. - 10/23/2019										
1130/2:Cracking (RC and Other)	ft	50	100	50	0	0	0	0	0	0
Notes:Minor vertical hairline cracks to bottom of all beams. See Photo. - 10/23/2019										
206/3:Timber Column	each	16	100	16	0	0	0	0	0	0
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	72	50	36	50	36	0	0	0	0
1900/2:Distortion	ft	36	0	0	100	36	0	0	0	0
Notes:East abutment cap bows outward 3" at center. - 10/23/2019										
331/1:Re Conc Bridge Railing	ft	52	100	52	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor channel alignment from the south. 9/2015 - 2: HBP overlay in 2015. East abutment cap bows outward 3" at center. 9/27/2017 - Channel cleanout both sides in 2017. - 10/23/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-129-13.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	66.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BLOOMING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 00' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 16' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	628091.4 5319381.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 28 50 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 30 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1966 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	November 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	25.9 Ft.	212 Structure Load Rated	04/26/2018
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-129-13.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	427	100	427	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	66	0	0	100	66	0	0	0	0
4000/3:Settlement	ft	66	0	0	100	66	0	0	0	0
Notes:Inward movement at top to all four corners of Structure. Bow of 2-3" at South Abutment. Inward movement at the top and outward movement at the bottom causing lean to South Abutment. See Alert code 2 for measurements. - 11/26/2019										
330/1:Metal Bridge Railing	ft	98	100	98	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	98	100	98	0	0	0	0	0	0
8398/2:Slope Protection	each	1	0	0	100	1	0	0	0	0
4000/2:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Minor settlement of Rip Rap along North Abutment. - 11/26/2019										
8401/2:Wings	each	4	50	2	50	2	0	0	0	0
1130/2:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
Notes:Large Cracks at top of NW and SW corners of Wings. See Photo. - 11/26/2019										

Remarks: 1/5/2006 - Movement inward measured at top of south abutment increased since last inspection. SE 9.25", SW 8" corners. 01/09/2008 - Movement abutments unchanged. NBI Remarks: Vertical cracks both abutments, crack in SW wing open 1 - 4" @ the NW wing with some spalling. Poor vertical roadway alignment from north. Vertical cracks in southwest and northwest wing corners with seepage. Channel bank erosion both banks east of structure & near the northeast corner of abutment. Erosion of ditch where enters channel near the SW wing. County Forces bolted metal support plate to NW Wing and NW Corner of North Abutment. Abutment is cracked and separated at top moving away from wing. See Photo. County Forces added Rip rap long North Abutment and added more along South Abutment. Inspection Incomplete due to High Water. See Photo. 10/29/2019. Inspection Completed 11/26/2019. - 11/26/2019

Alert Code 1: South abutment bows inward approximately 2" - 3". - 11/26/2019

Alert Code 2: South abutment moved in 10" east and 10" west side, no change from previous. North abutment moved in 10" east and 6" west side, a change from 9 & 6" previous. Both abutments continue inward movement. South abutments leans in @ the top 1 3/4" in 4' measured @ center of abutment, no change from previous inspection. 10/2017 - No change in lean or inward movement of the south abutment. North abutment moved in 10" east and 7" west. Some minor movement at NW corner. 10/2019 - West Abutment Inward Movement: 7 3/4" NW Corner. A change from 6" Previous Inspection. Additional Movement Observed. 12" NE Corner. A Change from 10" Previous Inspection. Additional Movement Observed. 10/2019 - East Abutment Inward Movement: 11" SE Corner. A change from 10" Previous Inspection. Additional Movement Observed. 11 1/2" SW Corner. A change from 10" Previous Inspection. Additional Movement Observed. County notified of the additional movement. No Lean Measurements due to High Water. 11/2019 - No Change in Lean at South Abutment. - 11/26/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-129-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	43.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	OAKVILLE TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HAZEN BROOK	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 1 NORTH EMERADO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 55' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 16' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	628323.7 5309543.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 10 19 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 7 14 Tons
208 Dk Overburden	1 None	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	15 Tons
27 Yr Built	1954 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	November 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.2 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	1 48 05/16/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	04/27/2018
	26.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-129-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	635	75	477	16	100	6	36	4	22
Notes:Inspection incomplete due to roadway impassible. Slippery, wet conditions due to minimum maintenance road. See photo. 10/23/2019. - 11/26/2019										
1170/1:Split/Delamination (Timber)	sq.ft	36	0	0	0	0	100	36	0	0
Notes:Time Planks at both ends split. See Photo. - 11/26/2019										
1180/1:Abrasion	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Wear to tops of both planks. See Photo. - 11/26/2019										
7000/1:Damage	sq.ft	22	0	0	0	0	0	0	100	22
Notes:Damage to SE Corner and South end of deck. See Photo. Section loss and split end deck plank. - 11/26/2019										
107/2:Steel Opn Girder/Beam	ft	95	0	0	0	0	0	0	100	95
1000/2:Corrosion	ft	95	0	0	0	0	0	0	100	95
Notes:Rusting to all Girders. - 11/26/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Inspection incomplete due to roadway impassible. Slippery, wet conditions due to minimum maintenance road. See photo. 10/23/2019. - 11/26/2019										
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of Effectiveness. - 11/26/2019										
111/2:Timber Open Girder	ft	479	41	197	0	0	45	216	14	66
1130/2:Cracking (RC and Other)	ft	53	0	0	0	0	100	53	0	0
Notes:Some rotting and crushing of all timber girders. Timber girder 17 is missing. - 11/26/2019										
1140/2:Decay/Section Loss	ft	229	0	0	0	0	71	163	29	66
Notes:Some rotting and crushing of all timber girders. Timber girder 17 is missing. - 11/26/2019										
206/3:Timber Column	each	14	64	9	36	5	0	0	0	0
1140/3:Decay/Section Loss	each	4	0	0	100	4	0	0	0	0
Notes:Minor decay at and below the water line at North Abutment. - 11/26/2019										
1170/3:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes:Pile 7 South Abutment Split at top. See Photo. - 11/26/2019										
216/3:Timber Abutment	ft	56	91	51	9	5	0	0	0	0
1140/3:Decay/Section Loss	ft	5	0	0	100	5	0	0	0	0
Notes:Decay to South abutment below the water line. - 11/26/2019										
235/2:Timber Pier Cap	ft	59	51	30	49	29	0	0	0	0
1170/2:Split/Delamination (Timber)	ft	29	0	0	100	29	0	0	0	0
Notes:Split to North Abutment Cap. - 11/26/2019										
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Poor vertical roadway alignment. No curb or railing. Slight fire damage to south cap & west four girders. Timber girders 7, 13 and 15 are cracked with steel girders placed adjacent to them. Girders are rusty. Vehicle damage both ends of deck planks. Delineators placed on each side of the wheel path on south end to prevent the erosion areas at the SE and SW Corners. Inspection incomplete due to roadway impassible. Slippery, wet conditions due to minimum maintenance road. See photo. 10/23/2019. Inspection completed 11/26/2019. - 11/26/2019

Alert Code 1: Some rotting and crushing of all timber girders. Scour hole under structure 25' x 100' x 1.5' deep. 10/2015 - Timber girder 17 is missing. - 11/26/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-129-19.0

Alert Code 2: 10/2015 - Void area behind SE and SW corner of south abutment 5 x 2 x 3' deep at SE Corner and 2x2x3' deep at SW Corner. Severe bump at South end of Bridge. See Photo. - 11/26/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-129-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	68.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	FAIRFIELD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	8 WEST 1 NORTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 47' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 16' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	628677.0 5294460.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 18 33 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 11 20 Tons
Dk Protect	None	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	33 Tons
Age and Service		Appraisal	
27 Yr Built	1979 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 26, 2019
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	25.9 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/15/2017
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	07/12/2017
51 Bridge Rdwy Width - Curb to Curb	25.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-129-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	635	90	571	9	60	0	0	1	4
1140/1:Decay/Section Loss	sq.ft	14	0	0	71	10	0	0	29	4
Notes:Section loss to Deck Planks. CS 4 near SW Corner. See Photo. CS 2 near NW Corner. See Photo. - 9/26/2019										
1150/1:Check/Shake	sq.ft	50	0	0	100	50	0	0	0	0
Notes:Timber Deck Planks with various checks.shakes on surface. See Photo. - 9/26/2019										
107/2:Steel Opn Girder/Beam	ft	217	0	0	77	167	23	50	0	0
1000/2:Corrosion	ft	217	0	0	77	167	23	50	0	0
Notes:Corrosion to all Girders with section loss to Girder 6 near South Abutment. See Alert Code 2. - 9/26/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Loss of effectiveness to all Girders. - 9/26/2019										
111/2:Timber Open Girder	ft	121	66	80	17	20	12	15	5	6
1140/2:Decay/Section Loss	ft	41	0	0	49	20	37	15	15	6
Notes:Section loss at to Girders 4, 8 and 11 Near North and South Abutment. Decay/Loading to Girders 4, 8 and 11 approx. 10' from South Abutment. See Photos and Alert Code 2. Section loss completely through Girder 1 near North Abutment. - 9/26/2019										
206/2:Timber Column	each	14	86	12	7	1	7	1	0	0
1140/2:Decay/Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Section loss of 2" to Pile 7 North Abutment. See Photo. - 9/26/2019										
1170/2:Split/Delamination (Timber)	each	1	0	0	0	0	100	1	0	0
Notes:Pile 3 North Abutment Split at op 3/4". No Change. See Photo and Alert Code 2. - 9/26/2019										
216/2:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb. No railing. Girder #11 from the west split. Southwest wing pile rotted. Dead End sign posted south end only. South channel bank erosion east side of structure. One split pile in center of north abutment open to 3/4". Posted Sign 33 Ton South Side Only. Poor Channel Alignment from the West. Volunteer Tree Growth NW Wing. See Photo. - 9/26/2019

Alert Code 2: Rotting of timber girders 4, 8, and 11 above both abutments out to about one foot away- outside girder at northwest corner completely rotted thru. Steel girder #6 above south abutment cap has section loss to the web and bottom flange of up to 25%- other girders above both caps have approximately 10% section loss to the web and bottom flange. - 9/26/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-130-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BLOOMING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	KELLY SLOUGH	102 Direction of Traffic	2 2-way traffic
09 Location	7 W 3 N OF GRAND FORKS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 58' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 15' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	629804.3 5315754.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 35 64 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 21 39 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.3 Ft.	Underwater	N
48 Length of Max Span	21 Ft.	Other Special	N
49 Structure Length	24.00 Ft.	218 Channel Profile	1 48 01/01/2000
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	27.4 Ft.	212 Structure Load Rated	02/22/2017
52 Deck Width	28.3 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-130-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	690	100	690	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	350	0	0	86	300	14	50	0	0
1000/2:Corrosion	ft	350	0	0	86	300	14	50	0	0
Notes:Minor Rusting to all Girders with minor pitting to underside of Flanges. See Photo. - 11/4/2019										
515/2:Steel Protective Coating	sq.ft	350	0	0	86	300	14	50	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	350	0	0	86	300	14	50	0	0
Notes:Loss of Coating. No Effectiveness. - 11/4/2019										
111/2:Timber Open Girder	ft	87	100	87	0	0	0	0	0	0
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	60	100	60	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	60	100	60	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Pitting with some minor section loss to bottom flanges some beams. Water level control structure 100' west of bridge. - 11/4/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-130-19.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	OAKVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SALT WATER COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 1 NORTH EMERADO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 55' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 15' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	629931.3 5310196.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 35 64 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 39 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2002 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	30 Ft.	Other Special	N
49 Structure Length	33.14 Ft.	218 Channel Profile	1 48 05/25/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.5 Ft.	212 Structure Load Rated	04/27/2018
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-130-19.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	240	88	210	13	30	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	30	0	0	100	30	0	0	0	0
Notes:Patched prestressed West outside T-Beam. See Photo. - 10/23/2019										
215/2:Re Conc Abutment	ft	60	95	57	0	0	5	3	0	0
1080/2:Delamination/Spall/Patched Area	ft	3	0	0	0	0	100	3	0	0
Notes:Spalling to SW Corner of Abutment. See Photo. - 10/23/2019										
1130/2:Cracking (RC and Other)	ft	6	100	6	0	0	0	0	0	0
Notes:Minor vertical cracks to both abutments. No Photo CS 1. - 10/23/2019										
330/1:Metal Bridge Railing	ft	66	100	66	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [] NBI Remarks: Diagonal cracking at wing corners and minor vertical cracks in both abutments. One spall area upper portion center of north abutment. Cracking & spalling top of SW wing, cracking top of SE wing. 10/2015 - In 2015 county forces repaired the west outside triple tee beam by attaching metal plates to the outside and under to the second leg of the triple tee beam and encased in concrete. See photos. - 10/23/2019

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SEC 409

Structure Number: 18-130-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	52.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	OAKVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 2 SOUTH EMERADO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 53' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 16' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	629208.4 5305707.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 11 20 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 6 12 Tons
208 Dk Overburden	26 Gravel/Dirt	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	19 Tons
27 Yr Built	1919 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	October 31, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.9 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	1 48 05/25/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	10/17/2011
	24.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 18-130-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	624	90	564	10	60	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	60	0	0	100	60	0	0	0	0
Notes:Decay underneath with white rotting. - 10/31/2019										
107/2:Steel Opn Girder/Beam	ft	194	0	0	77	150	23	44	0	0
1000/2:Corrosion	ft	194	0	0	77	150	23	44	0	0
Notes:Rusting to Girders. - 10/31/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of Effectiveness. - 10/31/2019										
111/2:Timber Open Girder	ft	266	84	222	17	44	0	0	0	0
1170/2:Split/Delamination (Timber)	ft	44	0	0	100	44	0	0	0	0
Notes:Minor splitting to tops of nailers. - 10/31/2019										
206/3:Timber Column	each	14	93	13	7	1	0	0	0	0
1170/3:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes:Pile 1 north abutment split open 1/2" at the top. See Photo. - 10/31/2019										
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Areas of peeling on both railings. - 10/31/2019										
332/1:Timb Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
7000/3:Damage	each	1	0	0	100	1	0	0	0	0
Notes:Fire Damage to NE Wing. - 10/31/2019										

Remarks: NBI Remarks: Rusty steel girders. Bottom flange girder #9 pitted with some section loss. Some minor rotting underside of deck. Fire damage to NE wing and rail post. Top wing plank broke-northeast wing. Minor rotting of timber piles @ water line & below. 10/2015 - Pile 1 north abutment split open 1/2" at the top. - 10/31/2019

Alert Code 1: Timber girders number 4 and 6 split. - 10/31/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-130-36.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	50.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	UNION TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 17 SOUTH EMERADO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 40' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 15' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	630548.9 5282461.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 30 55 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 19 35 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	26 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1936 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	45 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 11, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	25.9 Ft.	Other Special	N
48 Length of Max Span	21 Ft.	218 Channel Profile	1 48 05/22/2017
49 Structure Length	22.97 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/30/2016
51 Bridge Rdwy Width - Curb to Curb	24.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, inspector1
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-130-36.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	377	100	377	0	0	0	0	0	0
54/1:Timber Slab	sq.ft	161	98	158	2	3	0	0	0	0
Notes:Minor rotting to various areas of underside of deck. - 12/11/2019										
1140/1:Decay/Section Loss	sq.ft	3	0	0	100	3	0	0	0	0
Notes:Decay Section loss to underside of timber deck mid span near west end. See photo. - 12/11/2019										
107/2:Steel Opn Girder/Beam	ft	230	0	0	0	0	100	230	0	0
1000/2:Corrosion	ft	230	0	0	0	0	100	230	0	0
Notes:Rusting to all Girders. Minor pitting to bottom ad underside of bottom flanges. See photo. - 12/11/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of Effectiveness. - 12/11/2019										
206/3:Timber Column	each	8	88	7	13	1	0	0	0	0
1170/3:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes:Pile 2 at SW Corner Split with an opening of 3/8". See Photo. - 12/11/2019										
215/3:Re Conc Abutment	ft	39	0	0	0	0	49	19	51	20
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Inspection incomplete due to High water and ice preventing access. See Photo. 11/20/2019. Inspection incomplete due to Snow and Ice. See Photo. 12/11/2019. - 12/11/2019										
1080/3:Delamination/Spall/Patched Area	ft	19	0	0	0	0	100	19	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Inspection incomplete due to High water and ice preventing access. See Photo. 11/20/2019. Inspection incomplete due to Snow and Ice. See photo. 12/11/2019. - 12/11/2019										
1090/3:Exposed Rebar	ft	20	0	0	0	0	0	0	100	20
Notes:Inspection incomplete due to High Water. See Photo. 10/28/2019. Inspection incomplete due to High water and ice preventing access. See Photo. 11/20/2019. Inspection incomplete due to Snow and Ice. See photo. 12/11/2019. - 12/11/2019										
216/3:Timber Abutment	ft	16	100	16	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	16	75	12	25	4	0	0	0	0
1900/2:Distortion	ft	4	0	0	100	4	0	0	0	0
Notes:Crushing of Timber Pier Cap at NE and SE Corners. See Photo. - 12/11/2019										

Remarks: NBI Remarks: No railings. Rusty stringers. Minor rotting of ends of timber cap north abutment. Underside of corrugated steel decking rusting through. See Photo. Volunteer Tree Growth near SE Corner. Inspection incomplete due to High Water. See Photo. 10/28/2019. Inspection incomplete due to High water and ice preventing access. See Photo. 11/20/2019. Deck and Superstructure, Timber Cap, Timber Columns, and Timber Abutment Inspection completed 12/11/2019. Concrete Abutment and Channel Inspection incomplete due to Ice and Snow. See Photo. - 12/11/2019

Alert Code 1: Numerous spallout areas on the south abutment with approximately 3" of section loss with no exposure of reinforcing steel. Tree Drift Build up at SW Corner of Structure. See photo. - 12/11/2019

Alert Code 2: Severe deterioration of concrete with approximately 5" of section loss to the lower 1/3 of the north abutment with advanced corrosion to the outside layer of reinforcing steel. - 12/11/2019

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SEC 409

Structure Number: 18-131-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	71.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	TURTLE RIVER TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 3 NORTH OF MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 07' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 14' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	631383.8 5331270.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 15 27 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 9 17 Tons
208 Dk Overburden	1 None	70 Bridge Posting	2 20.0-29.9%below
Age and Service		209 Posted in "Tons"	26 Tons
27 Yr Built	1978 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	17 Ft.	90 Date of Last Inspection	October 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.2 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 05/25/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	26.2 Ft.	212 Structure Load Rated	07/26/2017
52 Deck Width	26.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-131-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	818	85	692	15	120	1	6	0	0
1140/1:Decay/Section Loss	sq.ft	20	0	0	70	14	30	6	0	0
Notes:Decay to ends of deck planks to both ends of bridge. - 10/24/2019										
1180/1:Abrasion	sq.ft	106	0	0	100	106	0	0	0	0
Notes:Wear to various timber planks. See Photo. - 10/24/2019										
107/2:Steel Opn Girder/Beam	ft	367	0	0	100	367	0	0	0	0
1000/2:Corrosion	ft	367	0	0	100	367	0	0	0	0
Notes:Rusting to all Girders. See Photo. - 10/24/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	50	50	50	50	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	50	50	50	50	0	0
Notes:Loss of coating. Various areas with no effectiveness. - 10/24/2019										
111/2:Timber Open Girder	ft	92	100	92	0	0	0	0	0	0
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	62	100	62	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
Notes:Scour hole along south abutment - 15' x 35' x 1.5' deep. - 10/24/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb. No railing. Minor rusting of girders. Old abutment in channel under the structure. Some minor section loss to flanges of most girders. Channel cleanout both sides of structure in 2011. Some cracked & worn timber deck planks. - 10/24/2019

Alert Code 1: Scour hole along south abutment - 15' x 35' x 1.5' deep. - 10/24/2019

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Structure Number: 18-131-13.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BLOOMING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST OF MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 00' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 14' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	631374.3 5319362.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	November 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.5 Ft.	Underwater	N
48 Length of Max Span	36 Ft.	Other Special	N
49 Structure Length	76.12 Ft.	218 Channel Profile	1 48 05/30/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.5 Ft.	212 Structure Load Rated	04/27/2018
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	SOS-18(4)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, inspector1
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-131-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	148	100	148	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	446	100	445	0	1	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Minor Spall to Joint above Pier on Beam 2 from the West. - 11/21/2019										
210/3:Re Conc Pier Wall	ft	33	100	33	0	0	0	0	0	0
Notes:Inspection Incomplete due to High Water. See Photo. 10/29/2019. - 11/21/2019										
215/2:Re Conc Abutment	ft	69	100	69	0	0	0	0	0	0
Notes:Inspection Incomplete due to High Water. See Photo. 10/29/2019. - 11/21/2019										
330/1:Metal Bridge Railing	ft	151	50	76	50	75	0	0	0	0
1900/1:Distortion	ft	75	0	0	100	75	0	0	0	0
Notes:Distortion to East Railing due to East Beam Laterally moving to the East. see Photo. - 11/21/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:Inspection Incomplete due to High Water. See Photo. 10/29/2019. - 11/21/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb. South abutment moved inward 1 1/4", north abutment inward 1" measured at the top on the west side. Channel bank erosion downstream. Minor Tree Drift lodged against Center Pier West Side. See Photo. Inspection Incomplete due to High Water. See Photo. 10/29/2019. Inspection completed 11/21/2019. - 11/21/2019

Alert Code 1: 10/2019 - East Beam South Span and North span moved 4 3/8" Laterally to the East. A change of the East beam south span & east beam north span moved 4 1/4" laterally to the east over center pier. 3 7/8" previous inspection, 2 1/2" prior to that. Continued movement east of east outside beam in 2011 & no additional movement in 2013. Some additional movement observed in 2015. 10/2017 - No additional movement of east outside beam or abutments in 2017. Additional movement observed in 2019. North Abutment inward movement of 1 3/4" in NE Corner and 1 1/4" in NW Corner. Change of 1" Previous Inspection West Side. South Abutment Inward Movement of 2 1/4" SE Corner and 1 1/4" SW Corner. - 11/21/2019

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Structure Number: 18-131-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BLOOMING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	KELLYS SLOUGH	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 1 SOUTH MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 59' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 14' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	631378.4 5317701.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 54 98 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 32 59 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1987 106 Yr Reconstructed -1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 21, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	31.2 Ft.	Other Special	N
48 Length of Max Span	29 Ft.	218 Channel Profile	1 48 05/30/2017
49 Structure Length	32.15 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	04/27/2018
51 Bridge Rdwy Width - Curb to Curb	31.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, inspector1
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-131-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	259	100	259	0	0	0	0	0	0
206/2:Timber Column	each	18	94	17	6	1	0	0	0	0
Notes:Inspection Incomplete due to High Water. See Photo. 10/29/2019. - 11/21/2019										
1170/2:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes:Inspection Incomplete due to High Water. See Photo. 10/29/2019.Minor split top of pile #5 north abutment - see photo - 11/21/2019										
216/2:Timber Abutment	ft	69	100	69	0	0	0	0	0	0
Notes:Inspection Incomplete due to High Water. See Photo. 10/29/2019. - 11/21/2019										
235/2:Timber Pier Cap	ft	69	100	69	0	0	0	0	0	0
Notes:Inspection Incomplete due to High Water. See Photo. 10/29/2019. - 11/21/2019										
330/1:Metal Bridge Railing	ft	62	100	62	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:Inspection Incomplete due to High Water. See Photo. 10/29/2019. - 11/21/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Inspection Incomplete due to High Water. See Photo. 10/29/2019. - 11/21/2019										

Remarks: NBI Remarks: No curb. Minor embankment erosion around north wings. Some rotting to tops of all wing piles. Pile 5 north abutment split and open approx. 3/8" at top. Poor channel alignment from the west. Inspection Incomplete due to High Water. See Photo. 10/29/2019. Inspection completed 11/21/2019. - 11/21/2019

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SEC 409

Structure Number: 18-131-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	82.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BLOOMING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SALT WATER COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 5 SOUTH MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 56' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 14' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	631495.8 5311548.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 21 38 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 12 23 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1958 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 29, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.3 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 05/30/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	212 Structure Load Rated	07/13/2017
52 Deck Width	25.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-131-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	786	81	636	19	150	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	150	0	0	100	150	0	0	0	0
Notes:Delaying to various planks underside of deck. - 10/29/2019										
107/2:Steel Opn Girder/Beam	ft	305	0	0	100	305	0	0	0	0
1000/2:Corrosion	ft	305	0	0	100	305	0	0	0	0
Notes:Rusting to all girders. - 10/29/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Loss of effectiveness of the coating. - 10/29/2019										
111/2:Timber Open Girder	ft	184	100	184	0	0	0	0	0	0
206/3:Timber Column	each	14	71	10	29	4	0	0	0	0
1140/3:Decay/Section Loss	each	4	0	0	100	4	0	0	0	0
Notes:Rotting of pile at Water Line 7-10 at South Abutment. - 10/29/2019										
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	62	100	62	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor channel alignment. Rusty girders. Minor rotting of deck planks. No curb. South cap tilting back slightly on the west end. Old piling in channel under structure. Channel bank erosion downstream. Some rotting of abutment pile @ water line. Southwest top wing plank broken. Channel bank erosion near NW wing. - 10/29/2019

Alert Code 1: Scour hole under structure - 20' x 50' x 2.0' deep. - 10/29/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-131-20.3

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	OAKVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST EMERADO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 55' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 14' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	630928.3 5308730.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 28 51 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 29 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1950 106 Yr Reconstructed	2015	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	6 Equal Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	5 Above Tolerable
29 ADT	180 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	12.00	71 Waterway Adequacy	6 Equal Minimum
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	6 Equal Min Criteria
Geometric Data		36 Traffic Safety Features	1 1 1 1
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	26 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	November 04, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	26.6 Ft.	Fracture Critical	N
48 Length of Max Span	48 Ft.	Underwater	N
49 Structure Length	52.00 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	218 Channel Profile	1 48 05/25/2017
	0.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb		207 Transporter Erector Routes and Sites	
	26.6 Ft.	212 Structure Load Rated	01/04/2016
52 Deck Width	28.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-131-20.3

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	336	100	336	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	58	100	58	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	104	100	104	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	104	100	104	0	0	0	0	0	0
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:West Slope Protection settling and displacing. - 11/4/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/2015 - Under contract in 2015 removed and replaced both abutments, removed and reset box girders and concrete curb, reset slope protection, guardrail retro fit, new approach guardrail and end treatments. Old Piling in the Channel. - 11/4/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-131-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	UNION TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST 1 NORTH REYNOLDS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 14' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	631636.3 5282971.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 37 67 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 22 41 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1995 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	40 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 28, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	18.7 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/26/2017
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	07/13/2017
51 Bridge Rdwy Width - Curb to Curb	28.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-131-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	721	100	721	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	436	100	436	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
111/2:Timber Open Girder	ft	121	97	117	3	4	0	0	0	0
1140/2:Decay/Section Loss	ft	4	0	0	100	4	0	0	0	0
Notes:Minor section loss to South outside girder. See Photo. - 10/28/2019										
206/2:Timber Column	each	14	100	14	0	0	0	0	0	0
216/2:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	99	65	2	1	0	0	0	0
1140/2:Decay/Section Loss	ft	1	0	0	100	1	0	0	0	0
Notes:Minor decay/section loss to NE Corner. - 10/28/2019										
332/1:Timb Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Ice damage to both sway braces - south side. See Photo. - 10/28/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-132-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	TURTLE RIVER TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 3 NORTH OF MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 07' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 12' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	632988.7 5331301.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 22 40 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 13 24 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1954 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.9 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	1 48 07/21/2015
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	07/25/2017
	27.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-132-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	678	97	654	0	0	4	24	0	0
1140/1:Decay/Section Loss	sq.ft	24	0	0	0	0	100	24	0	0
Notes:Decay to south end deck plank. No photo taken due to overburden. - 10/24/2019										
107/2:Steel Opn Girder/Beam	ft	289	0	0	83	240	17	49	0	0
1000/2:Corrosion	ft	289	0	0	83	240	17	49	0	0
Notes:Rusting to all Girders. See Photo. - 10/24/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	90	90	10	10
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	90	90	10	10
Notes:Loss of Coating. No effectiveness. - 10/24/2019										
111/2:Timber Open Girder	ft	171	97	165	4	6	0	0	0	0
1150/2:Check/Shake	ft	6	0	0	100	6	0	0	0	0
Notes:Check to Timber Girder near south abutment. - 10/24/2019										
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
7000/3:Damage	each	1	0	0	100	1	0	0	0	0
Notes:Minor fire damage to NE Wing. Wood sections charred. - 10/24/2019										

Remarks: NBI Remarks: Some rotting of wing piling. Minor fire damage to NE wing. Old concrete abutment in center of channel under structure. Riprap along south abutment only. Rotting & crushing of south end deck plank. - 10/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-132-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	RYE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01812 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 1 SOUTH MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	20.296	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 00' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 13' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	632232.3 5318447.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 27 48 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 29 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	35 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	305 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	10 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 27, 2019
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	32.2 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/30/2017
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	1.0 Ft Lt-Side	212 Structure Load Rated	08/09/2017
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-132-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	285	100	285	0	0	0	0	0	0
206/3:Timber Column	each	16	88	14	13	2	0	0	0	0
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes:Piles 2 and 3 at west abutment split at the top. Pile 2 is open 1/2" and Pile 3 is open 1". See Photo. - 11/27/2019										
216/3:Timber Abutment	ft	72	100	72	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	72	0	0	100	72	0	0	0	0
1900/2:Distortion	ft	72	0	0	100	72	0	0	0	0
Notes:Both abutments caps bowed out approximately 3". See Photo. - 11/27/2019										
330/1:Metal Bridge Railing	ft	62	100	62	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Old piling in channel. Rotting of wing piling. Poor channel alignment from the south. Both abutments and caps bowed out approximately 3". Channel runs along west abutment. 10/2015 - piles 2 and 3 west abutment split at the top, 2 is open 1/2", 3 is open 1" down to 3'. Mill and overlay on deck in 2015. 11/2019 - Top Wing Plank cracked at top of NE Wing. Inspection Incomplete due to High Water. See Photo. 10/29/2019. Inspection Completed 11/27/2019. - 11/27/2019

Alert Code 1: 11/2019 - Old Pile wedged underneath structure. See Photo. - 11/27/2019

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SEC 409

Structure Number: 18-132-13.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	RYE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 5 SOUTH OF MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 00' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 13' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	632945.4 5318808.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 52 93 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 28 52 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	80 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	September 27, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 05/30/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	212 Structure Load Rated	04/27/2018
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-132-13.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	351	100	351	0	0	0	0	0	0
206/2:Timber Column	each	18	100	18	0	0	0	0	0	0
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	98	100	98	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co	sq.ft	30	0	0	100	30	0	0	0	0
Notes:Peeling of coating to East Railing. - 9/27/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb. South channel bank erosion near the SE & NW wing. Top Plank of NW Wing section missing towards end. See Photo. Minor poor channel alignment from the West when coming through structure. See Photo. - 9/27/2019

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Structure Number: 18-132-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	75.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	RYE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	FRESH WATER COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	7 WEST 2 NORTH GRAND FORK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 57' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 13' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	633093.6 5312594.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 26 47 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 15 29 Tons
208 Dk Overburden	24 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1947 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	3 Intolerable - Correct
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	November 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	20.7 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 05/30/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	21.0 Ft.	212 Structure Load Rated	08/30/2016
52 Deck Width	22.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-132-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,098	100	1,093	1	5	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	5	0	0	100	5	0	0	0	0
Notes:Spalling along west edge of deck. See Photo. - 11/26/2019										
107/2:Steel Opn Girder/Beam	ft	459	0	0	99	456	0	0	1	3
1000/2:Corrosion	ft	459	0	0	99	456	0	0	1	3
Notes:Minor rusting to all Girders with Girder #2 from the east in the north span and girder #3 in the south span has section loss thru web at center pier. See Photo. - 11/26/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	25	25	25	25	50	50
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	25	25	25	25	50	50
Notes:Areas in limited to no coating causing no effectiveness. - 11/26/2019										
210/3:Re Conc Pier Wall	ft	20	0	0	80	16	20	4	0	0
1080/3:Delamination/Spall/Patched Area	ft	20	0	0	80	16	20	4	0	0
Notes:Spalling at both ends of the Pier Wall. See Photo. - 11/26/2019										
215/2:Re Conc Abutment	ft	49	84	41	12	6	4	2	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
Notes:Spalling at SW Corner of South Abutment. See Photo. - 11/26/2019										
1130/2:Cracking (RC and Other)	ft	6	0	0	100	6	0	0	0	0
Notes:Vertical Cracking to both Abutments. See Photo. - 11/26/2019										
330/1:Metal Bridge Railing	ft	98	100	98	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	65	65	35	35	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	35	0	0	100	35	0	0	0	0
Notes:Peeling to coating on east railing. - 11/26/2019										
331/1:Re Conc Bridge Railing	ft	98	84	82	10	10	6	6	0	0
1080/1:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
Notes:Spalling to both curbs. See Photo. - 11/26/2019										
1090/1:Exposed Rebar	ft	6	0	0	0	0	100	6	0	0
Notes:Spalling with exposed rebar to both sides of curb and various areas. See Photo. - 11/26/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	50	2	50	2	0	0	0	0
1080/2:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes:Spalling with exposed rebar to SW Wing See Photo. - 11/26/2019										
6000/2:Scour	each	1	0	0	100	1	0	0	0	0

Remarks: [] NBI Remarks: Poor horizontal and vertical roadway alignment. Channel beams bolted to abutments and pier across bottom of girders. Spalling of south abutment from bridge seat area to wing exposing reinforcing steel southeast & southwest corners. Posted narrow bridge both ends. Diagonal crack from outside stringer to midway down pier both ends of pier. Pier footing exposed with some concrete deterioration and some section loss on southwest corner. No lateral movement since 2001 inspection. Diagonal and vertical cracks in center pier and both abutments. Sharp curve and 35 mph signs at both ends. Areas of vehicle damage with spalling & deteriorating concrete west curb. Inspection Incomplete due to High Water. See Photo. 10/29/2019. Inspection Completed 11/26/2019. - 11/26/2019

Alert Code 1: Girder #2 from the east in the north span and girder #3 in the south span has section loss thru web at center pier. - 11/26/2019

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Structure Number: 18-132-17.0

Alert Code 2: 10/2019: South Abutment Inward Moved at 8 1/2" Previous South abutment moved at 8". Additional inward Movement Observed. North abutment 3.25", measured @ top near center. No change in 2011 or 2013, 2015, 2017, and 11/2019. Scour hole under structure 30' x 30' x 4.0' deep. 10/2015 - Ice damage, spalling, cracking upper portion of pier wall both ends. 10/2017 - No change in inward movement in 2017 - North abutment measurement changed to center of abutment.. - 11/26/2019

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SEC 409

Structure Number: 18-132-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BRANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 6 EAST EMERADO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 53' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 14' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	631867.6 5305549.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	November 27, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	13.8 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	41.99 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 7FT.7IN.X11FT.10IN.X47' SPPA		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 18-132-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	141	0	0	55	78	43	60	2	3
1000/3:Corrosion	ft	81	0	0	96	78	0	0	4	3
Notes:Rusting along culvert floor within all three. See Photo. Rusting through on North end. - 11/27/2019										
1900/3:Distortion	ft	60	0	0	0	0	100	60	0	0
Notes:Approx. 8-10" of sag in center of all three culverts. - 11/27/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	60	60	10	10	30	30
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	60	60	10	10	30	30
Notes:Areas along Culvert Floor with not coating. Loss of effectiveness and areas beginning to show limited effectiveness. - 11/27/2019										

Remarks: [] NBI Remarks: Embankment erosion southend between center & east pipe. Corrosion in west pipe lower portion with 3"x3" hole near the north end. Embankment erosion east side of east pipe, south side. Rusting to lower portion all pipes. Approximately 8"-10" of sag to all pipes. Vegetation buildup in channel both ends. See Photo. Inspection incomplete due to High Water. 10/30/2019. Inspection completed 11/27/2019. - 11/27/2019

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Structure Number: 18-132-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	87.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	25 Other Local Agencies
02 Highway District	Grand Forks District	22 Owner	25 Other Local Agencies
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BRANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	3 SOUTH 7 EAST OF EMERADO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 52' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 13' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	632420.4 5303953.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	5 Moderate Damage
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	1	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	November 27, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	13.8 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 7FT.7IN.X11FT.10IN.X47'SPPA		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 18-132-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	95	0	0	0	0	100	95	0	0
1000/3:Corrosion	ft	45	0	0	0	0	100	45	0	0
Notes:Rusting around all seam bolts. Rusting to lower portion of all culverts throughout entire length at water line. - 11/27/2019										
1900/3:Distortion	ft	50	0	0	0	0	100	50	0	0
Notes:West pipe distorted approximately 1' on east side of the barrel. Active corrosion around all seam bolts. The west pipe depressed area has section loss causing bolts to fall out and approximately 6 bolts. - 11/27/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	50	50	50	50
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	50	50	50	50
Notes:Areas of no coating. Loss of effectiveness. - 11/27/2019										

Remarks: NBI Remarks: Owner: Grand Forks County Water Resource District Inspection incomplete due to High Water. See Photo. 10/31/2019. Inspection completed 11/27/2019. - 11/27/2019

Alert Code 2: West pipe distorted approximately 1' on east side of the barrel. Active corrosion around all seam bolts. The west pipe depressed area has section loss causing bolts to fall out and approximately 6 bolts with questionable strength. Embankment erosion south end both culverts & north end of the west culvert. - 11/27/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-132-23.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ENGLISH COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 6 WEST MERRIFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 51' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 13' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	632989.3 5302345.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 30 54 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 33 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1994 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	15 Ft.	90 Date of Last Inspection	November 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.5 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	1 48 05/30/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/23/2017
	30.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-132-23.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	299	100	299	0	0	0	0	0	0
206/3:Timber Column	each	18	100	18	0	0	0	0	0	0
216/3:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	59	100	59	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	59	100	59	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Hole in diaphragm concrete south outside beam east end. 10/2015 - Top SW wing plank broken. Minor hairline cracks spaced at 1' intervals midspan most beams. Inspection incomplete due to High Water. See Photo. 10/29/2019. Inspection Completed 11/20/2019. - 11/20/2019

Alert Code 1: Scour hole just north of structure. - 30' x 100' x 3' deep. - 11/20/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-132-23.3

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	52.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	25 Other Local Agencies
02 Highway District	Grand Forks District	22 Owner	25 Other Local Agencies
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BRANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	4 SOUTH 7 EAST OF EMERADO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 52' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 13' 40.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	632524.0 5303712.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	3 Excessive Damage
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	1	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT 2019	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	November 27, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	11.8 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	27.89 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 11FT.10IN.X7FT.7IN.X27' SPPA		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 18-132-23.3

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	52	0	0	0	0	33	17	67	35
1000/3:Corrosion	ft	17	0	0	0	0	100	17	0	0
Notes:Rusting along floor bottom. Inspection incomplete due to High Water. See Photo. 10/31/2019. - 11/27/2019										
1900/3:Distortion	ft	35	0	0	0	0	0	0	100	35
Notes:Sag in top of both pipes of approximately 1'. East pipe pushed up 2.1'. West pipe pushed up 2.5'. - 11/27/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	65	65	0	0	35	35
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	65	65	0	0	35	35
Notes:Loss of coating along culvert floor. High Water. Inspection incomplete. 10/31/2019. - 11/27/2019										
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Sag in top of both pipes of approximately 1'. East pipe pushed up 2.1'. West pipe pushed up 2.5'. - 11/27/2019										

Remarks: Owner: Grand Forks County Water Resource District. Both pipes rusting at water line and below. Ice impact damage to south end of the west pipe. Inspection incomplete due to High Water. See Photo. 10/31/2019. Inspection completed 11/27/2019. - 11/27/2019

Alert Code 2: Sag in top of both pipes of approximately 1'. East pipe pushed up 2.1'. West pipe pushed up 2.5'. Horizontal measurements in 2013 indicate some additional sag/collapse of pipe. - 11/27/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-132-23.4

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	69.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	25 Other Local Agencies
02 Highway District	Grand Forks District	22 Owner	25 Other Local Agencies
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BRANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	4 SOUTH 7 EAST OF EMERADO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 51' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 13' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	632812.4 5302799.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	4 Considerable Damage
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	1	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	2 30 Year of ADT 2019	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	November 27, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	11.8 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	27.89 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 11FT.10IN.X7FT.7IN.X27' SPPA		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 18-132-23.4

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	52	0	0	0	0	67	35	33	17
1000/3:Corrosion	ft	17	0	0	0	0	0	0	100	17
Notes:Rusting to lower portion of both culverts at and below water line. - 11/27/2019										
1900/3:Distortion	ft	35	0	0	0	0	100	35	0	0
Notes:Sag in roof - both culverts to approximately 1'. Floor of west pipe pushed up approximately 1.6'. Floor of east pipe pushed up approximately 1.9'. - 11/27/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	60	60	40	40
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	60	60	40	40
Notes:Areas of limit to no coating causing no effectiveness. - 11/27/2019										
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Sag in roof - both culverts to approximately 1'. Floor of west pipe pushed up approximately 1.6'. Floor of east pipe pushed up approximately 1.9'. - 11/27/2019										

Remarks: NBI Remarks: Spillway 500' south of pipes. Owner: Grand Forks County Water Resource District. Inspection incomplete due to High Water. See Photo. 10/31/2019. Inspection completed 11/27/2019. - 11/27/2019

Alert Code 2: Sag in roof - both culverts to approximately 1'. Floor of west pipe pushed up approximately 1.6'. Floor of east pipe pushed up approximately 1.9'. - 11/27/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-132-24.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	74.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	BRANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01824 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ENGLISH COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST 5 NORTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	20.795	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 50' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 13' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	632964.8 5300734.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	70 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	42 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	37 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1951 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	445 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	12 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 30, 2019
32 Approach Roadway Width	25 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.3 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/23/2017
49 Structure Length	25.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	08/30/2016
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-132-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	667	100	667	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	417	0	0	100	417	0	0	0	0
1000/2:Corrosion	ft	417	0	0	100	417	0	0	0	0
Notes:Rusting to all Girders. - 10/30/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:No Coating. Loss of Effectiveness. - 10/30/2019										
206/3:Timber Column	each	14	64	9	21	3	14	2	0	0
1140/3:Decay/Section Loss	each	3	0	0	33	1	67	2	0	0
Notes:Section loss at water line causing rotting at East Abutment. - 10/30/2019										
1180/3:Abrasion	each	2	0	0	100	2	0	0	0	0
Notes:Wear to West South Pile due to ice damage. See Photo. - 10/30/2019										
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	51	30	49	29	0	0	0	0
1150/2:Check/Shake	ft	20	65	13	35	7	0	0	0	0
Notes:Check to West Abutment. - 10/30/2019										
1900/2:Distortion	ft	22	0	0	100	22	0	0	0	0
Notes:North end of West cap tilting back. - 10/30/2019										
330/1:Metal Bridge Railing	ft	52	100	52	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	52	73	38	15	8	6	3	6	3
1080/1:Delamination/Spall/Patched Area	ft	6	0	0	0	0	50	3	50	3
Notes:Spalling with complete section loss to areas of North Curb. See Photo. - 10/30/2019										
1130/1:Cracking (RC and Other)	ft	8	0	0	100	8	0	0	0	0
Notes:Various cracking to both curbs. See Photo. - 10/30/2019										
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/1:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Rip Rap Displaced and settled at both Abutments. - 10/30/2019										
8401/2:Wings	each	4	50	2	50	2	0	0	0	0
1140/2:Decay/Section Loss	each	2	0	0	100	2	0	0	0	0
Notes:Decay/rotting/section loss to SW and NW Wings. See Photo. - 10/30/2019										

Remarks: NBI Remarks: Some rotting of wing piling. Minor ice damage to outside pile-west abutment. West abutment cap tilting back North End Only. Top timbers west wings broken. 1" HBP overlay on structure in 2015. SW and NW Wings rotting top planks and Piling. See Photo. Fence runs through channel north of structure catching debris. - 10/30/2019

Alert Code 1: Piles 1 & 2 east abutment & #3 west abutment rotting @ the water line & below with some minor loss of bearing capacity, no settlement observed in 2013, 2015 or 2017. - 10/30/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-132-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	64.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	MICHIGAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST 6 SOUTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 13' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	633750.6 5283769.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 12 21 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 7 13 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	20 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed	2019	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	2013	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	September 05, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.6 Ft.	Underwater	N
48 Length of Max Span	33 Ft.	Other Special	N
49 Structure Length	32.60 Ft.	218 Channel Profile	1 48 05/22/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	28.1 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-132-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
15/2:Pre Concrete Top Flange	sq.ft	986	100	986	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	245	100	245	0	0	0	0	0	0
206/2:Timber Column	each	14	100	14	0	0	0	0	0	0
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	64	100	64	0	0	0	0	0	0
Notes:2019 - New Timber Pier Cap										
330/1:Metal Bridge Railing	ft	70	100	70	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb. Channel bank erosion downstream. Top backwall plank above timber cap tilting back.
8/2019 - In 2019 County forces reshaped & added additional riprap, reshaped channel, new concrete quad T-Beams, new timber caps. Repaired Southeast wing. Concrete poured along southwest corner of slope protection for additional erosion protection.

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Structure Number: 18-133-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	TURTLE RIVER TOWNSHI	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 08' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	634347.4 5332940.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1955 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2013	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	October 16, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10'X8'X35' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 18-133-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	69	15	10	86	59	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	33	0	0	100	33	0	0	0	0
1090/3:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	15	0	0	100	15	0	0	0	0
Notes: _										
8401/3:Wings	each	4	50	2	50	2	0	0	0	0

Remarks: NBI Remarks: Minor crack at wing corners-south wings and northwest wing. Diagonal crack in northeast wing with seepage. Spalling at the southeast wing corner with exposed rebar. Concrete deterioration with up to 1" section loss along all walls where floor meets the wall up the wall approximately 4".

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SEC 409

Structure Number: 18-133-10.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	FERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01833 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 2 SOUTH OF MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	27.194	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 03' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	634764.9 5323456.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 25 46 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 15 28 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1971 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	215 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	45 Ft.	Other Special	N
49 Structure Length	96.13 Ft.	218 Channel Profile	1 48 05/30/2017
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	07/07/2017
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	ER-118(3)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-133-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,874	100	2,874	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
107/2:Steel Opn Girder/Beam	ft	371	100	371	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
210/3:Re Conc Pier Wall	ft	39	100	39	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
215/2:Re Conc Abutment	ft	75	100	75	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
330/1:Metal Bridge Railing	ft	194	100	194	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
331/1:Re Conc Bridge Railing	ft	194	100	194	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
1130/1:Cracking (RC and Other)	ft	38	100	38	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019.Very minor vertical cracks in curb, both sides. - 11/18/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										

Remarks: NBI Remarks: Both channel banks eroding downstream. 9/2015 - Tree debris in channel under structure.
Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Inspection completed 11/18/2019. - 11/18/2019

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Structure Number: 18-133-10.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	FERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 2 SOUTH MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 02' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	634450.4 5323260.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 36 65 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	90 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	November 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	54 Ft.	Other Special	N
49 Structure Length	113.85 Ft.	218 Channel Profile	1 48 05/30/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	04/27/2018
52 Deck Width	28.9 Ft.	213 Federal Aid Project Number	BRO-18(8)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-133-10.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,272	99	3,230	1	42	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
1120/1:Efflorescence/Rust Staining	sq.ft	12	0	0	100	12	0	0	0	0
Notes:Underside of deck, span #2. - 11/18/2019										
1130/1:Cracking (RC and Other)	sq.ft	30	0	0	100	30	0	0	0	0
Notes:Minor transverse cracks in deck - see photo - 11/18/2019										
104/2:Pre Clsd Box Girder	ft	440	100	440	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
1110/2:Cracking (PSC)	ft	50	100	50	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Minor horizontal cracks in outside beams near abutments. - 11/18/2019										
210/3:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
215/2:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
330/1:Metal Bridge Railing	ft	226	100	226	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
515/1:Steel Protective Coating	sq.ft	100	60	60	40	40	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
3420/1:Peel/Bub/Crack(Stl Protect Cd	sq.ft	100	60	60	40	40	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Minor bubbling of paint both rails. - 11/18/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										

Remarks: Both channel banks eroding up & downstream. Minor cracks under deck with seepage. No curb. Minor horizontal cracks in outside beams lower portion near abutments. Minor transverse cracks in deck on roadway area - see photo 9/2015 - Some settling of the west side slope protection. Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Inspection completed on 11/18/2019. - 11/18/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-133-11.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	76.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	FERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01833 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH OF MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	26.495	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 02' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	634795.4 5322300.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 29 52 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	215 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 18, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 05/30/2017
49 Structure Length	95.14 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	08/23/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-133-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	738	93	689	7	49	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
1080/2:Delamination/Spall/Patched Area	ft	25	0	0	100	25	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Underside of beam legs both spans - 11/18/2019										
1090/2:Exposed Rebar	ft	24	0	0	100	24	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Lower portion of beam legs both spans - see photos. - 11/18/2019										
205/3:Re Conc Column	each	4	100	4	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
210/3:Re Conc Pier Wall	ft	36	100	36	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
215/3:Re Conc Abutment	ft	56	79	44	21	12	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
1080/3:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. North abutment under beams. - 11/18/2019										
1130/3:Cracking (RC and Other)	ft	7	0	0	100	7	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. North abutment diagonal cracks near wing corners - 11/18/2019										
234/2:Re Conc Pier Cap	ft	52	100	52	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
330/1:Metal Bridge Railing	ft	190	94	178	6	12	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
7000/1:Damage	ft	12	0	0	100	12	0	0	0	0
Notes:Vehicle damage to east rail - see photo. - 11/18/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
331/1:Re Conc Bridge Railing	ft	190	99	188	1	2	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. East curb near center - see photo - 11/18/2019										
1130/1:Cracking (RC and Other)	ft	28	100	28	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Minor vertical cracks in curb, both sides. - 11/18/2019										
4000/3:Settlement	each	1	100	1	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Both abutment moving inward. North abutment moving in 10" at the NE corner. South abutment moving in 4.5" measured at the southeast corner. No additional movement in 2019. - 11/18/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										

Structure Number: 18-133-11.0

Remarks: NBI Remarks: Cracking north abutment backwall at wing corners. Exposed footings pier #5. Spall on curb SW corner with exposed steel. 10/2015 - In 2014 contractor patched some areas of spalling and cracking on abutments and beams, removed trees and added riprap at both abutments. Metal straps anchored to wings at north wing corners. See local government letter. Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Inspection completed 11/18/2019.. - 11/18/2019

Alert Code 1: Vertical cracks both wing corners open to 1", 2" @ the NW corner, a change from 1" previously. South abutment moving inward 4" @ the SE corner, 2 1/4" previously & no movement @ the SW corner. Up to 2" of section loss with honeycombing lower portion south abutment. NE corner north abutment moving inward 8 3/4", a change from 8 1/2" & 7 1/4" previous 2 inspections. 10/2017 - North abutment moving in 10" measured at NE corner a change of 8.75". South abutment moving in 4.5" measured at SE corner a change from 4". Continued inward movement observed.. No additional inward movement observed in 2019. Inspection completed 11/18/2019. - 11/18/2019

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Structure Number: 18-133-11.1

200 System Designation	2 – County On	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	59.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	FERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01833 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH OF MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	26.594	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 02' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	634774.3 5323028.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Concrete continuous	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	99 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	78 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	24 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	215 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 19, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	30.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.0 Ft.	Other Special	N
48 Length of Max Span	29 Ft.	218 Channel Profile	1 48 05/30/2017
49 Structure Length	63.98 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	11/24/2015
51 Bridge Rdwy Width - Curb to Curb	22.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-133-11.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,572	95	1,492	5	80	0	0	0	0
1090/1:Exposed Rebar	sq.ft	30	0	0	100	30	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Spalling underside of Bridge East side structure span 2. See photo. - 11/19/2019										
1120/1:Efflorescence/Rust Staining	sq.ft	20	0	0	100	20	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Transverse cracking with seepage and efflorescence underside of structure. See photo. - 11/19/2019										
1130/1:Cracking (RC and Other)	sq.ft	30	0	0	100	30	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Various cracking underside of Bridge Deck. - 11/19/2019										
110/2:Re Conc Opn Girder/Beam	ft	240	96	230	4	10	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	8	0	0	100	8	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Spalling/honey combing to east side of span 2. East Outside Beam. - 11/19/2019										
1090/2:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
Notes:Spalling in diaphragm over pier exposing reinforcing steel. See Photo. - 11/19/2019										
205/3:Re Conc Column	each	2	0	0	100	2	0	0	0	0
1130/3:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
Notes:Cracking to both columns. See Photo. - 11/19/2019										
210/2:Re Conc Pier Wall	ft	16	100	16	0	0	0	0	0	0
1130/2:Cracking (RC and Other)	ft	3	100	3	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Minor vertical cracking to Pier wall. No Photo. - 11/19/2019										
215/2:Re Conc Abutment	ft	56	86	48	0	0	7	4	7	4
1080/2:Delamination/Spall/Patched Area	ft	4	0	0	0	0	100	4	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Spalling to upper portion of South Abutment. See photo. - 11/19/2019										
1130/2:Cracking (RC and Other)	ft	6	33	2	0	0	0	0	67	4
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Severe cracking near upper portion of SW Corner. See Photo. - 11/19/2019										
234/2:Re Conc Pier Cap	ft	16	100	16	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	128	88	113	12	15	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Spalling at connection to posts throughout both curbs and railing. See Photo. - 11/19/2019										
1130/1:Cracking (RC and Other)	ft	20	75	15	25	5	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Vertical cracking to various areas of both curbs and railing. See Photo. - 11/19/2019										
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/1:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Rip Rap settled and displaced at both abutments. - 11/19/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Structure Number: 18-133-11.1

Remarks: 1/9/2006 - Slight sag in all concrete beams, estimate 1/2"+. See photos. Level shots this inspection indicate very little change on rail. 0.62' SE drop corner 0.54' drop SW corner NBI Remarks: Vertical cracks at corners of both abutments at outside beams. Spalling at southwest corner south abutment. Numerous cracks in curbs. Slight sag to 1/2" all beams. Honey combed underside of curbs exposing reinforcing steel. Spalling in diaphragm over pier exposing reinforcing steel. 9/2015 - In 2014 county forces removed tree debris placed riprap at both abutments and wings. Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Inspection completed 11/19/2019. - 11/19/2019

Alert Code 1: Minor cracks in t-beam over pier. - 11/19/2019

Alert Code 2: Movement inward both abutments. 11/12/2019. North Abutment Inward Movement of 5 1/2" NW Corner. Previous Inspection 3" and 3" NE Corner. Addition Movement observed at NW and no additional at NE. Inward Movement of South abutment of 18" at SW Corner. Previous Inspection of 15" at SW corner & 12" at SE Corner. Previous Inspection of 10" at SE corner. Settlement of S. abutment. Level shots indicate 0.62' East Side from Pier 2 to South Abutment. Previous Inspection 0.54' drop - W. side from pier #2 to S. abutment. Level Shots indicate 0.14' drop from N. abutment to center pier W. side only. Level shots in 2011 indicate 0.62' drop-E. side & 0.56' drop-W. side from pier #2 to S. abutment. Level shots in 2013 indicate a 0.63' drop-E. side & 0.58' drop-W. side from pier #2 to abutment #1, some minor movement 2013. 9/2015 - Level shots in 2015 indicate .65' drop east side and .59' drop west side from pier 2 to south abutment. 10/2017 - No additional movement observed. Level shots taken indicate no additional settlement. Tree debris under both spans under structure restricting flow and buildup to Center Pier Restricting Flow. 11/2019 - Additional inward movement observed. 11/2019 - Level shots indicate 0.67' Drop East Side from Pier 2 to South Abutment. Previous inspection of 0.65'. Level shots indicated 0.61' drop west side from Pier 2 to South abutment. Previous in 2015 of 0.59'. No Change in level shots from North Abutment to Center Pier West Side. - 11/19/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-133-11.2

200 System Designation	2 – County On	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	60.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	FERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01833 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1.5 SOUTH OF MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	26.894	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 02' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	634788.3 5322655.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Concrete continuous	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	75 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	45 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1948 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	215 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 18, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 05/30/2017
49 Structure Length	62.99 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	04/27/2018
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 18-133-11.2

Structure Number: 18-133-11.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,582	98	1,552	2	30	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
1080/1:Delamination/Spall/Patched Area	sq.ft	30	0	0	100	30	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Spalling underside of deck both spans - 11/18/2019										
110/2:Re Conc Opn Girder/Beam	ft	243	95	230	4	10	1	3	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
1080/2:Delamination/Spall/Patched Area	ft	12	0	0	75	9	25	3	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. East outside girder span 1 - see photo. - 11/18/2019										
1090/2:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. East outside girder span 2. - 11/18/2019										
205/3:Re Conc Column	each	2	50	1	0	0	50	1	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
1090/3:Exposed Rebar	each	1	0	0	0	0	100	1	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
210/3:Re Conc Pier Wall	ft	16	81	13	19	3	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
1130/3:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Center pier minor vertical cracks. - 11/18/2019										
215/2:Re Conc Abutment	ft	49	82	40	8	4	10	5	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
1080/2:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes:Upper corners of the north abutment - see photos. - 11/18/2019										
1130/2:Cracking (RC and Other)	ft	10	50	5	0	0	50	5	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
234/2:Re Conc Pier Cap	ft	16	88	14	13	2	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
1130/2:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Minor diagonal cracks in pier cap. - 11/18/2019										
331/1:Re Conc Bridge Railing	ft	125	98	122	2	3	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Spall area to railing east side see photo. - 11/18/2019										
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Structure Number: 18-133-11.2

Notes: Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019

Remarks: Inward movement of NW corner north abutment. Vertical crack backside of curb over pier. Embankment erosion around SE wing. Channel bank erosion upstream & downstream. Spall on west beam south span exposing reinforcing steel. Spalling on underside of deck with exposed reinforcing steel. Vertical & diagonal cracking north abutment. Cracking & spalling north abutment NW & NE corners @ bridge seat. 9/2015 - In 2014 county forces removed tree debris. Placed riprap both abutments and wings. Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Inspection completed 11/18/2019. - 11/18/2019

Alert Code 1: 10/2017 - Tree debris under the structure and against east side center pier. - 11/18/2019

Alert Code 2: Spalling on west end south abutment and pier at waterline and below with up to 4" section loss west side of pier #2. All concrete tee beams sagging approximately 3 - 5" with some honeycombing & ice impact spalls. - 11/18/2019

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SEC 409

Structure Number: 18-133-11.3

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	FERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01833 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH OF MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	25.894	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 60.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	634807.8 5321569.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 46 83 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	215 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.9 Ft.	Underwater	N
48 Length of Max Span	40 Ft.	Other Special	N
49 Structure Length	86.94 Ft.	218 Channel Profile	1 48 05/30/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	29.5 Ft.	212 Structure Load Rated	04/27/2018
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	CBRS-1833(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-133-11.3

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	167	99	165	1	2	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Spalling to the top of west outside beam span #2 - north beam. - 11/18/2019										
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
1110/2:Cracking (PSC)	ft	165	100	165	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. very minor longitudinal cracking along the bottom portion of outside box beams. - 11/18/2019										
109/2:Pre Opn Conc Girder/Beam	ft	495	100	495	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
210/3:Re Conc Pier Wall	ft	33	100	33	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
215/2:Re Conc Abutment	ft	69	57	39	39	27	4	3	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
1080/2:Delamination/Spall/Patched Area	ft	30	0	0	90	27	10	3	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Spall areas under beams along top of the south abutment -see photo. - 11/18/2019										
330/1:Metal Bridge Railing	ft	174	100	174	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
3420/1:Peel/Bub/Crack(Stl Protect Cd	sq.ft	30	100	30	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Minor paint peeling to metal railing. - 11/18/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										

Remarks: NBI Remarks: Longitudinal cracks in bottom of box beams and outside at bottom post bolt holes. Spalling, cracking along top of south abutment with movement of south abutment. See photo. Minor movement of north abutment at NE corner. Channel bank erosion both banks upstream and downstream. Minor vehicle damage to guardrail end terminal at NW & SE corners. East side beam in the south span only sits on pier #2 by approximately 5" - 6", beams are centered on the west side. 10/2015 - Spalling to the top of west outside beam span #2 north beam. Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Inspection complete on 11/18/2019. - 11/18/2019

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Structure Number: 18-133-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	FERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 8 EAST MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 12' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	634100.4 5320065.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 44 80 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 22 40 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	September 27, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.5 Ft.	Underwater	N
48 Length of Max Span	51 Ft.	Other Special	N
49 Structure Length	109.91 Ft.	218 Channel Profile	1 48 05/30/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	04/27/2018
	29.5 Ft.	213 Federal Aid Project Number	BRO-18(13)
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 18-133-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,305	100	3,305	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	420	100	420	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	36	100	36	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	72	100	72	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	220	100	220	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb. 9/2015 - riprap added along west abutment and where the ditch enters the channel near the SE wing see photos. Volunteer Tree Growth SE Wing See Phot. - 9/27/2019

Structure Number: 18-133-12.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	FERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01833 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH OF MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	25.794	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	634813.4 5321327.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	70 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	38 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1948	67 Structural Condition	5 Above Min Tolerable
106 Yr Reconstructed	1976	68 Deck Geometry	5 Above Tolerable
42 Type of Service	1 Highway - On	69 Underclear. Vert & Horiz	N Not applicable (NBI)
	5 Waterway - Under	71 Waterway Adequacy	8 Equal Desirable
28 Lanes on Structure	2	72 App. Rdwy. Alignment	8 Equal Desirable Crit
29 ADT	215	36 Traffic Safety Features	0 0 0 0
30 Year of ADT	2019	113 Scour Critical	U Unknown Scour
109 Average Daily Truck Traffic	12.00		
19 Bypass, Detour Length	2 Miles		
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 18, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	25.9 Ft.	Other Special	N
48 Length of Max Span	46 Ft.	218 Channel Profile	1 48
49 Structure Length	49.87 Ft.	Chaining Date	05/30/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	None
	0.7 Ft Lt-Side	212 Structure Load Rated	04/27/2108
51 Bridge Rdwy Width - Curb to Curb	25.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-133-12.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	351	100	351	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
1110/2:Cracking (PSC)	ft	3	100	3	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
206/3:Timber Column	each	4	100	4	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
215/3:Re Conc Abutment	ft	43	81	35	9	4	9	4	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
1080/3:Delamination/Spall/Patched Area	ft	7	0	0	57	4	43	3	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Section at waterline north abutment and near center of the south abutment. - 11/18/2019										
1130/3:Cracking (RC and Other)	ft	1	0	0	0	0	100	1	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
216/2:Timber Abutment	ft	3	100	3	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
330/1:Metal Bridge Railing	ft	98	100	98	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
331/1:Re Conc Bridge Railing	ft	98	98	96	2	2	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
1090/1:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Minor areas of exposed rebar both sides. - 11/18/2019										
1130/1:Cracking (RC and Other)	ft	6	100	6	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										
8401/2:Wings	each	4	50	2	50	2	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/18/2019										

Remarks: [NBI Remarks: Poor channel alignment east - hits southeast corner. Channel bank erosion both banks. Spalling lower portion northwest corner north abutment. 2 ft. of reinforcing steel exposed on curb. Rotting of rail posts, west side. Timber wing added @ the SE corner in front of existing concrete wing with riprap added @ SE & NE wing corners. 10/2015 - In 2014 county forces added riprap to both abutments and wings. Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Inspection complete on 11/18/2019. - 11/18/2019

Alert Code 1: Vertical crack northwest wing, open to 1". Concrete deterioration with exposed rebar northwest corner of north abutment with 5" section loss at water line. - 11/18/2019

Alert Code 2: South abutment leans in 3 1/4" in 4' measured at center. No change in lean in 2011 - 2017. - 11/18/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-133-12.2

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	FERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01833 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH OF MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	25.295	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	634830.7 5320585.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	99 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	83 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1981 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	215 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 19, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	26.6 Ft.	Other Special	N
48 Length of Max Span	57 Ft.	218 Channel Profile	1 48 05/30/2017
49 Structure Length	60.04 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	04/27/2018
51 Bridge Rdwy Width - Curb to Curb	26.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-133-12.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	541	99	535	1	6	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	6	0	0	100	6	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. - 11/19/2019										
206/3:Timber Column	each	18	100	18	0	0	0	0	0	0
216/3:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	94	62	0	0	6	4	0	0
1140/2:Decay/Section Loss	ft	2	0	0	0	0	100	2	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Decay to areas around the damage at SE Corner. See Photo. - 11/19/2019										
7000/2:Damage	ft	2	0	0	0	0	100	2	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Ice Damage to outside 2' of cap at South abutment East side. See Photo. - 11/19/2019										
330/1:Metal Bridge Railing	ft	121	70	85	0	0	30	36	0	0
1020/1:Connection	ft	18	0	0	0	0	100	18	0	0
Notes:Guardrail post separating and pulling away from West outside girder causing spalling to Girder. See Photo. - 11/19/2019										
7000/1:Damage	ft	18	0	0	0	0	100	18	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Damage to Guardrail posts. See Photo. - 11/19/2019										
515/1:Steel Protective Coating	sq.ft	100	90	90	10	10	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	10	90	9	10	1	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Peeling and bubbling to various areas of NW Corner of Guardrail. - 11/19/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
1140/2:Decay/Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Top plank removed from Wing at NW Corner. See Photo. - 11/19/2019										

Remarks: NBI Remarks: Old abutments and piling in channel. South channel bank erosion upstream & downstream. Rotting of wing pile. Utility cable attached to west guardrail. Three (3) guardrail posts pulled away at northeast corner causing spalling to outside beam. 10/2015 - Ice damage to the outside 2' of cap on south abutment east side. In 2014 county forces added riprap to both abutments and wings. 10/2017 - Guardrail unattached at the lower 3 connections NE corner. Inspection incomplete due to impassible roadway. See Photo. 10/16/2019. Inspection completed 11/19/2019. - 11/19/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-133-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	RYE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01812 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SALT WATER COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 5 SOUTH OF MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	21.196	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 00' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 12' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	633604.9 5318514.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	305 30 Year of ADT 2013	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	October 04, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	40.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	13 Ft.	Other Special	N
49 Structure Length	41.01 Ft.	218 Channel Profile	1 48 05/30/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBRS-1812(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10'X8'X76' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 18-133-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	226	81	183	15	33	4	10	0	0
1130/3:Cracking (RC and Other)	ft	30	100	30	0	0	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor cracking in southeast and northwest wings with seepage. Minor hairline cracks in interior walls.

Alert Code 1: Two feet of buildup at each end of the east & west barrels, channel flows through center barrel.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-133-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 7 EAST MEKINOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 59' 29.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 12' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	633667.1 5316898.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 31 56 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1996 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	September 27, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.5 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	45.93 Ft.	218 Channel Profile	1 48 05/30/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	04/27/2018
	31.5 Ft.	213 Federal Aid Project Number	BRIDGE # 133-14
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-133-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	367	99	363	0	0	1	4	0	0
7000/2:Damage	ft	4	0	0	0	0	100	4	0	0
Notes:Ice Impact to SW Corner to Outside Beam. See Photo. - 9/27/2019										
206/3:Timber Column	each	18	100	18	0	0	0	0	0	0
216/3:Timber Abutment	ft	69	100	69	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	69	100	69	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	92	100	92	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Lack of Rip Rap West Abutment causing settlement. No Photo due to water levels. - 9/27/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb. Cracking & spall area to the SW corner of the south outside beam from ice impact, approximately 4' in length. Lack of riprap west abutment. 9/2015 - Embankment erosion near NW wing. SW Bridge End Marker Missing. See Photo. - 9/27/2019

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SEC 409

Structure Number: 18-133-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	RYE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 7 SOUTH MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 58' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 12' 07.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	634191.3 5315295.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 31 55 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 33 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1963 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	November 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.9 Ft.	Underwater	N
48 Length of Max Span	34 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	1 48 05/30/2017
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	04/27/2018
	26.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-133-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	302	93	282	5	15	2	5	0	0
1080/2:Delamination/Spall/Patched Area	ft	15	0	0	100	15	0	0	0	0
Notes:Inspection Incomplete due to High Water. See Photo. 10/29/2019. Areas of spalling with exposed rebar to bottom of channel beams 3 and 4 from the north. - 11/21/2019										
1090/2:Exposed Rebar	ft	5	0	0	0	0	100	5	0	0
Notes:Inspection Incomplete due to High Water. See Photo. 10/29/2019. Areas of spalling with exposed rebar to bottom of channel beams 3 and 4 from the north. - 11/21/2019										
215/3:Re Conc Abutment	ft	66	44	29	56	37	0	0	0	0
1130/3:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:Vertical Cracking at Corners of West abutment. See Photo. - 11/21/2019										
4000/3:Settlement	ft	33	0	0	100	33	0	0	0	0
Notes:Settlement of East Abutment with inward lean at the top and outward lean at the bottom. Refer to Alert Code 1 for Lean Measurements. - 11/21/2019										
330/1:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	72	97	70	3	2	0	0	0	0
1090/1:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
Notes:Spalling with Exposed Rebar at SW Corner at South Curb. See Photo. - 11/21/2019										
8398/3:Slope Protection	each	2	0	0	0	0	100	2	0	0
Notes:Inspection Incomplete due to High Water. See Photo. 10/29/2019. - 11/21/2019										
4000/3:Settlement	each	2	0	0	0	0	100	2	0	0
Notes:Slope Protection and Both abutments settled and displaced away. - 11/21/2019										
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
Notes:Inspection Incomplete due to High Water. See Photo. 10/29/2019. - 11/21/2019										
1130/3:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:Cracking to SW Wing Corner from Inward Movement. - 11/21/2019										

Remarks: 1/4/2006 - Movement measured at top of west abutment. Inward NW corner 8", SW corner 3". 01/09/2008 - Movement measurements west abutment. NW corner 9", SW corner 1 1/2". 12/29/2009 - Movement measurements West abutment. NW corner 10.5", SW corner 1.5". NBI Remarks: Damage to northwest end post exposing reinforcing steel and rest of end posts against abutments. Vertical cracks both abutments. Poor channel alignment. Top of south abutments at wing corners cracked with spalling due to pressure of abutment movement against concrete end posts. Areas of spalling with exposed rebar to bottom of channel beams 3 and 4 from the north. Slope protection settling both abutments & displaced @ the east abutment. Inspection Incomplete due to High Water. See Photo. 10/29/2019. Inspection completed 11/21/2019. - 11/21/2019

Alert Code 1: Abutments moving in-west abutment 2" southside & 12" north side, east abutment-3" north side and 2 1/2" south side. Inward lean of 1" in 4' west abutment & 1 1/4" in 4' east abutment measured @ center. No change in movement in 2011 or 2013. Additional movement observed in 2015. 10/2017 - East abutment leans in 1.25" in 4', west abutment leans in 1.25" in 4'. Some minor movement west abutment. No movement at the 4 wing corners.. 10/2019 - Inward Movement West Abutment - 2 1/4" SW Corner and 13" NW Corner. Additional Movement Observed. No Additional Movement Observed on East Abutment. No Lean Measurements due to High Water. See Photo. 10/29/2019. 11/2019 - No Change in Lean at Both Abutments. - 11/21/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-133-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	RYE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 8 SOUTH MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 57' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 12' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	634264.2 5313659.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 40 72 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2019	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 29, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	37 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	1 48 05/30/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	212 Structure Load Rated	04/27/2018
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-133-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	279	100	278	0	1	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Minor spalling to underside of Tee Beam near North End. See photo. - 10/29/2019										
206/2:Timber Column	each	14	86	12	7	1	7	1	0	0
7000/2:Damage	each	2	0	0	50	1	50	1	0	0
Notes:Ice Damage to South Outside Piling at Both Abutments. See photo. See Alert Code 1. - 10/29/2019										
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	62	100	62	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	79	100	79	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb. Minor rotting top of wing piles. Top wing plank @ SW wing broken away. - 10/29/2019

Alert Code 1: Ice impact damage to south outside timber pile east abutment, with approximately 30% section loss. 10/2017
- County removed piling in channel, installed additional riprap both abutments and reshaped channel banks under structure, replaced west abutment timber cap. - 10/29/2019

Alert Code 2: Ice impact damage to south outside timber pile east abutment, with approximately 30% section loss. See photo. - 10/29/2019

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SEC 409

Structure Number: 18-133-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BRANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST 1 SOUTH GRAND FORK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 54' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	634775.3 5308263.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1978 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 27, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.7 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	41.99 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, DBL 11-6X7-4X47' SPPA & SINGLE 11-7		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 18-133-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	128	0	0	94	120	6	8	0	0
1900/3:Distortion	ft	128	0	0	94	120	6	8	0	0
Notes:Slight sag in roof of both center and south pipe. North pipe has a 6"-8" sag in the roof. - 11/27/2019										
515/3:Steel Protective Coating	sq.ft	100	70	70	0	0	0	0	30	30
3440/3:Eff (Stl Protect Coat)	sq.ft	100	70	70	0	0	0	0	30	30
Notes:Lower portion of all three culverts no coating. Loss of effectiveness. - 11/27/2019										

Remarks: NBI Remarks: Slight sag in roof of both center and south pipe. North pipe has a 6"-8" sag in the roof. Corrosion at lower seam-north and middle pipe. Vegetation buildup both ends south pipe & east end of middle pipe - channel flows through middle and north culverts. 10/2015 - North pipe has 6" heave in floor at east end. Inspection incomplete due to High Water. See Photo. 10/31/2019. Inspection completed 11/27/2019. - 11/27/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-133-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	MICHIGAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST-6 SOUTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	635363.5 5284121.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 27 49 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 20 38 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1972 106 Yr Reconstructed	2016	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT	2019	7 Above Minimum
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 28, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.8 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	24.20 Ft.	218 Channel Profile	1 48 05/22/2017
50 Curb/Sidewalk Widths	0.4 Ft Rt-Side	Chaining Date	None
	0.4 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/30/2016
	24.8 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-133-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	634	100	634	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	349	100	349	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
111/2:Timber Open Girder	ft	110	100	110	0	0	0	0	0	0
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/2:Timber Abutment	ft	56	96	54	4	2	0	0	0	0
1160/2:Crack (Timber)	ft	2	0	0	100	2	0	0	0	0
Notes:Minor crack North abutment. - 10/28/2019										
235/2:Timber Pier Cap	ft	61	97	59	3	2	0	0	0	0
1140/2:Decay/Section Loss	ft	2	0	0	100	2	0	0	0	0
Notes:Section loss to NE Corner of Cap. North Abutment. See Photo. - 10/28/2019										
330/1:Metal Bridge Railing	ft	48	100	48	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	48	100	48	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
7000/2:Damage	each	1	0	0	100	1	0	0	0	0
Notes:Minor Fire Damage to SW Wing. - 10/28/2019										

Remarks: [] NBI Remarks: Minor fire damage to southwest corner, backwall plank & wing. Rotting of wing piles. Southwest ditch eroding where it enters the channel near the southwest wing. Bank erosion & scour in channel east of structure. 6/27/2016 - in 2016 County forces replaced girders, deck and curb and railing. Added riprap both banks under structure. Riprap placed in ditch where it enters channel near SW wing. . - 10/28/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-134-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	TURTLE RIVER TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 8 Service R	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN #13	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 09' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	635282.4 5336148.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1970 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	0 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	November 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	I-4-029()147
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10'X6'X26' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-134-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	52	83	43	17	9	0	0	0	0
1130/2:Cracking (RC and Other)	ft	18	50	9	50	9	0	0	0	0
Notes:Minor cracks in walls. - 11/18/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor vertical cracks in all walls. Minor diagonal cracks northwest and northeast wings, with seepage. 1' of vegetation/sediment buildup south barrel channel flows thru north barrel. 10/2017 - No BEM's west side Inspection not completed due to roadway impassible. See Photo. Inspection completed 11/18/2019. - 11/18/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-134-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	TURTLE RIVER TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH OF MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 07' 17.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	635512.5 5331387.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 36 65 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 39 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1976 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	November 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.6 Ft.	Underwater	N
48 Length of Max Span	60 Ft.	Other Special	N
49 Structure Length	62.01 Ft.	218 Channel Profile	1 48 07/21/2015
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.9 Ft.	212 Structure Load Rated	04/27/2018
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-134-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	535	100	535	0	0	0	0	0	0
1110/2:Cracking (PSC)	ft	60	100	60	0	0	0	0	0	0
Notes:Inspection incomplete due to Roadway Impassible. See photo. 10/14/2019. Minor Hairline horizontal crack running entire length of south outside beam. - 11/19/2019										
215/3:Re Conc Abutment	ft	59	93	55	0	0	7	4	0	0
1090/3:Exposed Rebar	ft	2	0	0	0	0	100	2	0	0
Notes:Inspection incomplete due to roadway impassible. See Photo. 10/14/2019. Spall with exposed rebar under outside beam southeast corner of the east abutment. - 11/19/2019										
1130/3:Cracking (RC and Other)	ft	57	97	55	0	0	4	2	0	0
Notes:Inspection incomplete due to roadway impassible. See Photo. 10/14/2019. U-shape cracks to both Abutments. - 11/19/2019										
330/1:Metal Bridge Railing	ft	125	100	125	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	125	100	125	0	0	0	0	0	0
4000/2:Settlement	each	1	100	1	0	0	0	0	0	0
Notes:Inspection incomplete due to roadway impassible. See Photo. 10/14/2019. West Abutment with lean and inward movement. See Alert Code 1. - 11/19/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/21/2009 - Inward movement of east abutment 2" @ both corners. Inward movement of 4" NW corner west abutment & 8" @ the SW corner of the west abutment. NBI Remarks: Poor channel alignment. Diagonal cracks northwest and southeast wings. U-shape crack in both abutments with seepage. Spall area under outside beam southeast corner of the east abutment. Poor horizontal roadway alignment. Hairline horizontal crack running entire length of south outside beam. Tree drift buildup near SW Corner of Structure. Inspection incomplete due to impassible roadway from High Water. See Photo. 10/14/2019. Inspection completed 11/19/2019. - 11/19/2019

Alert Code 1: East abutment moving inward 2". West abutment inward movement of 6" at NW Corner. Previous movement of 4 3/4". 11/2019 - Additional Inward Movement observed on the northwest corner. West Abutment inward movement of 10 1/2" at W Corner. Previous movement of 10" on the southwest corner. 11/2019 - Additional inward movement observed. Previous Inspections from 4 1/2" & 9 1/2" previously. West abutment leans away 1" in 4' measured @ center of abutment. No change in lean in 2013, 2015, 2017, and 2019. Additional inward movement of 1/4" observed @ the NW corner and 1/2" @ the SW corner in 2015. 10/2017 - No additional inward movement. - 11/19/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-134-05.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	TURTLE RIVER TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 1 EAST MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 07' 40.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	636201.9 5332132.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 28 51 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 16 31 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	210 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	56 Ft.	Other Special	N
49 Structure Length	118.11 Ft.	218 Channel Profile	1 48 07/21/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	07/07/2017
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	SOS-18(2)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-134-05.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,337	91	3,037	9	300	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	70	100	70	0	0	0	0	0	0
Notes:Minor transverse cracking across bridge deck. - 11/19/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	300	0	0	100	300	0	0	0	0
Notes:Wear to wheel paths across bridge deck exposing aggregate. See Photo. - 11/19/2019										
107/2:Steel Opn Girder/Beam	ft	456	99	453	0	0	1	3	0	0
1000/2:Corrosion	ft	3	0	0	0	0	100	3	0	0
Notes:Inspection no Complete due to high water under structure. See Photo. 10/14/2019. Rusting near South Abutment where Girder is tied into Abutment. No Photo taken due to minor corrosion. - 11/19/2019										
515/2:Steel Protective Coating	sq.ft	100	95	95	0	0	5	5	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	95	95	0	0	5	5	0	0
Notes:Limited effectiveness to coating at Girder ends near Abutment. - 11/19/2019										
210/3:Re Conc Pier Wall	ft	43	100	43	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	92	100	92	0	0	0	0	0	0
313/2:Fixed Bearing	each	4	100	4	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	240	100	240	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	240	98	234	3	6	0	0	0	0
1130/1:Cracking (RC and Other)	ft	10	40	4	60	6	0	0	0	0
Notes:Cracking mainly near the end posts. See Photo. Typical all corners. - 11/19/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Embankment settling behind SE & NW wings. Minor cracks at abutment wing corners. Wearing with some exposed rock on deck in wheel paths. 10/2015 - Minor transverse deck cracking. Volunteer Tree Growth NE Corner of North Abutment. See Photo. Misaligned Bridge End Marker NW Corner. See Photo. Missing Bridge End Marker SW Corner. See Photo. Substructure and Superstructure Incomplete due to High Water under Structure. See Photo. 10/14/2019. Inspection completed 11/19/2019. - 11/19/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-134-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	82.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	TURTLE RIVER TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 3 NORTH OF MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 07' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	636200.0 5331082.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 20 37 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 12 23 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	56 Ft.	Other Special	N
49 Structure Length	175.85 Ft.	218 Channel Profile	1 48 05/09/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	07/07/2017
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	BRO-18(3)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-134-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,930	100	4,930	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	200	100	200	0	0	0	0	0	0
Notes:CS 1 Cracking transversely to deck. - 11/19/2019										
107/2:Steel Opn Girder/Beam	ft	689	100	689	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	95	100	95	0	0	0	0	0	0
1130/3:Cracking (RC and Other)	ft	3	100	3	0	0	0	0	0	0
Notes:Inspection incomplete due to High Water under Structure. See Photo. 10/14/2019. Vertical and Map cracking to Pier Wall 2. East Side. See Photo. - 11/19/2019										
215/2:Re Conc Abutment	ft	92	100	92	0	0	0	0	0	0
313/2:Fixed Bearing	each	8	100	8	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	351	100	351	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	351	100	351	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor channel bank erosion under structure. Channel bank erosion upstream and downstream. Spalling to tops of corner wings near curb at NE and SW Corners. Inspection not completed due to High Water under Structure. See Photo. 10/14/2019. Inspection completed 11/19/2019. - 11/19/2019

Alert Code 1: Tree drift east of structure center span and east side pier 2 blocking flow. Tree build up in span 1 under and east of structure. See Photo. Volunteer Tree Growth to NW, SW, SE Corners. See Photo. - 11/19/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-134-06.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	TURTLE RIVER TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 07' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	636205.1 5331357.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 28 52 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 17 31 Tons
208 Dk Overburden	41 Other	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1951 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	November 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/06/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	07/25/2017
	29.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-134-06.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	743	100	743	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	344	90	310	10	34	0	0	0	0
1000/2:Corrosion	ft	34	0	0	100	34	0	0	0	0
Notes:Inspection incomplete due to High Water Under Structure. See Photo. 10/31/2019. Rusting to bottom flange portions all Girders. No Photo taken due to minor areas. - 11/19/2019										
515/2:Steel Protective Coating	sq.ft	100	95	95	0	0	5	5	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	95	95	0	0	5	5	0	0
Notes:Inspection incomplete due to High Water Under Structure. See Photo. 10/31/2019. Areas of limited effectiveness fo coating. - 11/19/2019										
111/2:Timber Open Girder	ft	121	100	121	0	0	0	0	0	0
206/2:Timber Column	each	14	64	9	36	5	0	0	0	0
1170/2:Split/Delamination (Timber)	each	4	0	0	100	4	0	0	0	0
Notes:Inspection incomplete due to High Water Under Structure. See Photo. 10/31/2019. Piles 2, 3, 4 on North Abutment and Pile 4 at South Abutment split and open at top 1/2". See photo. - 11/19/2019										
7000/2:Damage	each	1	0	0	100	1	0	0	0	0
Notes:Damage to Pile 1 South Abutment. - 11/19/2019										
216/2:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:Inspection incomplete due to High Water Under Structure. See Photo. 10/31/2019. - 11/19/2019										
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
Notes:Inspection incomplete due to High Water Under Structure. See Photo. 10/31/2019. - 11/19/2019										
1140/2:Decay/Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Top Plant and portion of NW wing mowing timber. - 11/19/2019										

Remarks: NBI Remarks: No railing. No curb. Top wing plank broken NE corner. See Photo. Spillway east of structure. Poor horizontal and vertical roadway alignment. Three split pile in north abutment and 1 split pile in south abutment open to approximately 1/2". 10/2017 - Tree growth near wing corners and in channel. See Photo. Oil Asphalt application to timber deck. Inspection incomplete due to High Water Under Structure. See Photo. 10/31/2019. Inspection Completed 11/19/2019. - 11/19/2019

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SEC 409

Structure Number: 18-134-06.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	TURTLE RIVER TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH OF MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 07' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	634647.5 5331328.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1970 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2013	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 18, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 8'X8'X34' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 18-134-06.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	102	99	101	1	1	0	0	0	0
1090/2:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes: _										
1130/2:Cracking (RC and Other)	ft	18	100	18	0	0	0	0	0	0
Notes: _										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor hairline cracks at wing corners and headwall. Minor cracks in center and outside walls. Spalling at northwest wing corner with exposed rebar. Channel runs through south barrel.

Alert Code 1: Two feet of sediment & vegetation buildup both ends center & north barrels. Scour hole just off the west end of culvert - 2' x 8' x 1.0' deep.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-134-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	FERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTHEAST OF MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 06' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	636236.8 5329167.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 44 79 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1966 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	73 Ft.	Other Special	N
49 Structure Length	75.13 Ft.	218 Channel Profile	1 48 07/21/2015
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.5 Ft.	212 Structure Load Rated	04/27/2018
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-134-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	732	100	732	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	151	100	151	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	151	92	139	8	12	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
Notes:Spalling near lower portion of both curbs and various areas throughout. Cause from blade damage. See Photo. - 11/19/2019										
1090/1:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
Notes:Spalling with exposed rebar near lower portion of East curb near mid length. See photo. - 11/19/2019										
8398/1:Slope Protection	each	2	50	1	0	0	50	1	0	0
Notes:Inspection incomplete due to High Water under Structure. See Photo. 10/14/2019. - 11/19/2019										
4000/1:Settlement	each	1	0	0	0	0	100	1	0	0
Notes:South Slope Protection settling causing undermining of South Abutment. See Photo and Alert Code 1. - 11/19/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Old piling in channel. Channel bank erosion both sides of structure. Inspection incomplete due to High Water under Structure. See Photo. 10/14/2019. Inspection completed 11/19/2019. Various chipping and spalling near lower portion of concrete curbs. - 11/19/2019

Alert Code 1: South abutment slope protection settling with some minor undermining exposing 3 abutment piles.10/2017 - Undermining at SE wing. - 11/19/2019

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Structure Number: 18-134-08.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	MANVEL CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01808 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	CITY OF MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 04' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	635340.2 5326499.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 46 83 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2005 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	600 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.8 Ft.	Underwater	N
48 Length of Max Span	42 Ft.	Other Special	N
49 Structure Length	125.00 Ft.	218 Channel Profile	1 48 05/25/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	32.2 Ft.	212 Structure Load Rated	04/27/2018
52 Deck Width	34.4 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-134-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,291	100	4,291	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	492	100	492	0	0	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. - 11/18/2019										
210/2:Re Conc Pier Wall	ft	70	100	70	0	0	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. - 11/18/2019										
215/2:Re Conc Abutment	ft	77	100	77	0	0	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. - 11/18/2019										
330/1:Metal Bridge Railing	ft	250	100	250	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. - 11/18/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. - 11/18/2019										

Remarks: New in 2005 NBI Remarks: Channel bank erosion up & downstream. Poor channel alignment to the south.
 10/2015 - Minor blade damage to west end of deck. Some sediment buildup east side pier 3. Channel flows thru center span. Inspection incomplete due to High Water. See Photo. Inspection completed on 11/18/2019. - 11/18/2019

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SEC 409

Structure Number: 18-134-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	FERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	SOUTHWEST CORNER MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 04' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	635210.4 5325689.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 43 78 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1975 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	220 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	8.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	November 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	119.09 Ft.	218 Channel Profile	1 48 05/25/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	04/30/2018
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	SRS-6-153(1)51
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-134-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	925	100	921	0	4	0	0	0	0
Notes:Inspection incomplete due to Roadway impassible. See Photo. 10/22/2019. - 11/18/2019										
1080/2:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes:Inspection incomplete due to Roadway impassible. See Photo. 10/22/2019. Two small spall areas on top of beam #5 spans #1&2. 11/18/2019. - 11/18/2019										
1110/2:Cracking (PSC)	ft	6	100	6	0	0	0	0	0	0
Notes:Inspection incomplete due to Roadway impassible. See Photo. 10/22/2019. Minor cracks in beams. 11/18/2019. - 11/18/2019										
210/3:Re Conc Pier Wall	ft	59	95	56	5	3	0	0	0	0
Notes:Inspection incomplete due to Roadway impassible. See Photo. 10/22/2019. - 11/18/2019										
1080/3:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:Inspection incomplete due to Roadway impassible. See Photo. 10/22/2019. - 11/18/2019										
1130/3:Cracking (RC and Other)	ft	4	100	4	0	0	0	0	0	0
Notes:Inspection incomplete due to Roadway impassible. See Photo. 10/22/2019. - 11/18/2019										
215/2:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
Notes:Inspection incomplete due to Roadway impassible. See Photo. 10/22/2019. - 11/18/2019										
330/1:Metal Bridge Railing	ft	236	100	236	0	0	0	0	0	0
Notes:Inspection incomplete due to Roadway impassible. See Photo. 10/22/2019. - 11/18/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
Notes:Inspection incomplete due to Roadway impassible. See Photo. 10/22/2019. - 11/18/2019										
331/1:Re Conc Bridge Railing	ft	236	99	234	1	2	0	0	0	0
Notes:Inspection incomplete due to Roadway impassible. See Photo. 10/22/2019. - 11/18/2019										
1090/1:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
Notes:Inspection incomplete due to Roadway impassible. See Photo. 10/22/2019. Small spall area to of curb southeast corner, see photo. - 11/18/2019										
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
Notes:Inspection incomplete due to Roadway impassible. See Photo. 10/22/2019. - 11/18/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Inspection incomplete due to Roadway impassible. See Photo. 10/22/2019. - 11/18/2019										

Remarks: NBI Remarks: Vehicle damage to curb southeast corner exposing reinforcing steel. Spall area on beam #2 span #1. Tree drift buildup south side of pier #2. Channel bank erosion up & downstream. Minor spalling at waterline south end of pier #3 with some minor section loss. Old piling in channel. 10/2017 - Riprap placed on west abutment. Wear on top of beams on wheel path. Inspection incomplete due to Roadway impassible. See Photo. 10/22/2019. Inspection completed 11/18/2019. - 11/18/2019

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SEC 409

Structure Number: 18-134-19.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	BRANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01833 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ENGLISH COULEE DRAIN #11	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST OF GRAND FORKS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	17.497	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 55' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	636342.0 5309721.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 43 78 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	32 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1983 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	790 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	8.00	36 Traffic Safety Features	1 0 0 0
19 Bypass, Detour Length	8 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 23, 2019
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	36.7 Ft.	Other Special	N
48 Length of Max Span	44 Ft.	218 Channel Profile	1 48 05/23/2017
49 Structure Length	45.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	04/30/2018
51 Bridge Rdwy Width - Curb to Curb	35.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	38.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 18-134-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,625	100	1,625	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	443	100	443	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	75	96	72	0	0	4	3	0	0
1080/2:Delamination/Spall/Patched Area	ft	3	0	0	0	0	100	3	0	0
Notes:Upper portion near center of the south abutment with exposed anchor pin. see photo. - 8/23/2019										
331/1:Re Conc Bridge Railing	ft	92	90	83	10	9	0	0	0	0
1130/1:Cracking (RC and Other)	ft	18	50	9	50	9	0	0	0	0
Notes:Minor vertical cracks both barriers - see photo. - 8/23/2019										
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Spall under center beam south abutment, exposing bolt. South channel bank erosion downstream. Slope protection runs thru channel and along both abutments. - 8/23/2019

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SEC 409

Structure Number: 18-134-19.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	BANNER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ENGLISH COULEE DRAIN #11	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST OF GRAND FORKS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 55' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	636098.2 5308830.9	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 40 72 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2011 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	180 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	98 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	August 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.4 Ft.	Underwater	N
48 Length of Max Span	32 Ft.	Other Special	N
49 Structure Length	35.00 Ft.	218 Channel Profile	1 48 07/21/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	31.4 Ft.	212 Structure Load Rated	12/09/2011
52 Deck Width	32.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-134-19.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	258	100	258	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	72	72	52	28	20	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	20	0	0	100	20	0	0	0	0
Notes:Minor spalling under beams both abutments - see photo. - 8/23/2019										
330/1:Metal Bridge Railing	ft	70	100	70	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/2011 - New structure in 2011. 08/10/2013 - Cracking on top of northeast corner of abutment. 8/2015 - Minor spalling under beams both abutments. Minor tree growth near the southwest wing. County forces added concrete encased protection at the two south legs - see photo. Railroad structure 100' north - see channel view. - 8/23/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-134-21.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BRANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ENGLISH COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 3 WEST MERRIFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 53' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	636069.3 5305636.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 32 59 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 19 35 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1987 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	40 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 31, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	26.9 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/23/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.3 Ft Lt-Side	212 Structure Load Rated	07/25/2017
51 Bridge Rdwy Width - Curb to Curb	27.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 18-134-21.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	678	100	678	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	295	66	195	34	100	0	0	0	0
1000/2:Corrosion	ft	295	66	195	34	100	0	0	0	0
Notes:Rusting to all Girders. See Photo. - 10/31/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Loss of Coating. Loss of effectiveness. - 10/31/2019										
111/2:Timber Open Girder	ft	171	100	171	0	0	0	0	0	0
206/2:Timber Column	each	14	100	14	0	0	0	0	0	0
216/2:Timber Abutment	ft	56	89	50	11	6	0	0	0	0
1900/2:Distortion	ft	6	0	0	100	6	0	0	0	0
Notes:Distortion to West Deck plank above abutment causing roadway filtration. No Photo taken due to filtration. - 10/31/2019										
231/2:Steel Pier Cap	ft	56	0	0	100	56	0	0	0	0
1000/2:Corrosion	ft	56	0	0	100	56	0	0	0	0
Notes:Rusting to Steel. See Photo. - 10/31/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of Effectiveness. - 10/31/2019										
235/2:Timber Pier Cap	ft	56	96	54	4	2	0	0	0	0
Notes:Damage to South end of West Cap. See Photo. - 10/31/2019										
7000/2:Damage	ft	2	0	0	100	2	0	0	0	0
Notes:Damage to South end of West cap. See Photo. - 10/31/2019										
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [] NBI Remarks: All wing pile rotted. Heavy vegetation in channel both sides. Conduit attached to south side of structure. West end deck plank separating with roadway filtration - 10/31/2019

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SEC 409

Structure Number: 18-134-22.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City		37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01833 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ENGLISH COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST OF GRAND FORKS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	0 0	105 Federal Lands Highways	Not applicable
16 Latitude	47d 53' 17.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	636447.9 5305480.6	Condition	
98 Border Bridge	Not Applicable (P) %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	790 30 Year of ADT 2016	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	8.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 01, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	15 Ft.	Other Special	N
49 Structure Length	32.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	10/19/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CNOC-1833(058)
53 Min Vert Clear. Over Bridge	99 Ft. 11 In.	214 Delayed Inspection	
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 14 X 8 X 84' RCBC		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-134-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	168	100	168	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes: _										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
Notes: _										

Remarks: 10/19/2016 - New box culvert installed. 11/2017 - Vegetation in channel east of structure restricting flow.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-134-28.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	ALLENDALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01833 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 3 SOUTH MERRIFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.798	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 47' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	636689.8 5295651.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1995 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	120 30 Year of ADT 2013	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	August 04, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.98 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X5X70' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-134-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	141	100	141	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Some barrel sections not flush - open to 1". [NBI Remarks: 04/26/2010 - Riprap added to east end and channel cleanout east of structure in 2009.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-134-30.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	ALLENDALE TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01833 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 1 SOUTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	6.099	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 45' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	636822.6 5291381.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1958 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	90 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12'X7'X37' SPPA		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-134-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	75	0	0	100	75	0	0	0	0
1900/3:Distortion	ft	75	0	0	100	75	0	0	0	0
Notes:Sag to roofs of both Culverts. See General Remarks. - 10/30/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	50	50	0	0	50	50
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	50	50	0	0	50	50
Notes:Rusting along floor of both culverts. Loss of Coating. No Effectiveness. - 10/30/2019										

Remarks: Sag in both pipes of between 0.4 and 0.5 tenths - estimated. Rusting with some minor section loss lower half of culverts. 10/2019 - 1' of sediment buildup east end of North Culvert. - 10/30/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-134-34.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	80.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	MICHIGAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST-5 SOUTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 42' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	635962.3 5284667.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 20 37 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 11 21 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	35 Tons
Age and Service		Appraisal	
27 Yr Built	1970 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	30 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 26, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.2 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/22/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	04/30/2018
51 Bridge Rdwy Width - Curb to Curb	26.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-134-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/2:Timber Deck	sq.ft	700	100	700	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	348	78	273	22	75	0	0	0	0
1000/2:Corrosion	ft	75	0	0	100	75	0	0	0	0
Notes:Corrosion it Steel Girders causing structures. - 9/26/2019										
515/2:Steel Protective Coating	sq.ft	100	90	90	10	10	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	90	90	10	10	0	0	0	0
111/2:Timber Open Girder	ft	125	100	125	0	0	0	0	0	0
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/2:Timber Abutment	ft	56	96	54	4	2	0	0	0	0
1170/2:Split/Delamination (Timber)	ft	2	0	0	100	2	0	0	0	0
Notes:Delamination to back Abutment wall at West Abutment in-between Piling 4 and 5. - 9/26/2019										
235/2:Timber Pier Cap	ft	59	95	56	0	0	5	3	0	0
1140/2:Decay/Section Loss	ft	3	0	0	0	0	100	3	0	0
Notes:Section Loss to NE Corner of East abutment. See photo. - 9/26/2019										
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Rip Rap displaced under structure. No Photo take due to scour hole. - 9/26/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Top Planks, Split on all corners. See Photo. - 9/26/2019										

Remarks: NBI Remarks: Poor channel alignment to the north. Riprap displaced in channel under structure. Channel bank erosion downstream. 9/2015 - Top plank cracked on all wing corners. - 9/26/2019

Alert Code 1: Scour hole under structure 10' x 15' x 2' deep. - 9/26/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-135-01.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	TURTLE RIVER TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MORAIS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 7 NORTH MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 10' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 09' 23.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	637052.0 5337789.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 43 77 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 46 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1992 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	November 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.6 Ft.	Underwater	N
48 Length of Max Span	57 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 06/11/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	26.9 Ft.	212 Structure Load Rated	04/30/2018
52 Deck Width	27.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-135-01.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	541	99	533	1	3	1	5	0	0
1080/2:Delamination/Spall/Patched Area	ft	8	0	0	38	3	63	5	0	0
Notes: Inspection not Completed due to Roadway Impassible. See Photo. Minor spalling tops of beams. - 11/18/2019										
206/2:Timber Column	each	34	94	32	6	2	0	0	0	0
1170/2:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes: Inspection no Completed due to Roadway Impassible. See Photo. Piles # 4 & 7 east abutment split at top under cap to approximately 1/2" see photo. - 11/18/2019										
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	97	57	3	2	0	0	0	0
1150/2:Check/Shake	ft	2	0	0	100	2	0	0	0	0
Notes: Inspection not Completed due to Roadway Impassible. See Photo. Checking near south end of east abutment cap. - 11/18/2019										
330/1:Metal Bridge Railing	ft	121	100	121	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor horizontal roadway alignment. Channel bank erosion both banks, both sides of structure. NE & SW ditches eroding where they enter the channel. 10/2015 - Some minor areas of spalling to the top of beams. Piles 4 & 7 split at the top and open to 1/2" east abutment. Inspection incomplete due to Roadway Impassible. See Photo. Inspection completed 11/18/2019. - 11/18/2019

Alert Code 1: Large tree branches on inslopes under structure, both abutments, see photos. - 11/18/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-135-02.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	TURTLE RIVER TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH 1 EAST MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 10' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 08' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	637713.4 5337336.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 43 77 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 46 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1994 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	53 Ft.	Other Special	N
49 Structure Length	144.03 Ft.	218 Channel Profile	1 48 07/21/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	04/30/2018
	27.9 Ft.	213 Federal Aid Project Number	BRO-18(19)
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-135-02.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	1,400	100	1,394	0	4	0	2	0	0
1080/2:Delamination/Spall/Patched Area	ft	6	0	0	67	4	33	2	0	0
Notes: Inspection incomplete due to roadway impassible. See Photo. Area of spalling north end of beams at pier #2 - see photo. - 11/18/2019										
210/3:Re Conc Pier Wall	ft	62	71	44	5	3	24	15	0	0
1080/3:Delamination/Spall/Patched Area	ft	18	0	0	17	3	83	15	0	0
Notes: Inspection incomplete due to roadway impassible. See Photo. Spall areas that were patched on the south side of pier #2 - see photo. - 11/18/2019										
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/1: Metal Bridge Railing	ft	289	100	289	0	0	0	0	0	0
515/1: Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1: Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2: Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Spall areas top of piers 2 & 3 south side to a max. 3" depth. Conduit attached to outside west guardrail. Embankment erosion to both banks, both sides of structure. Minor horizontal cracking lower portion both piers. 10/2015 - Some spall areas to the top of some beams at pier 2. 10/2017 - Sediment buildup south side pier#3 4' to 5'. Inspection incomplete due to Roadway Impassible. Inspection complete 11/18/2019. - 11/18/2019

Alert Code 1: 10/2015 - Vehicle damage to the SW guardrail and end treatment. Large amount of tree drift along both inslopes east side of structure and thru channel blocking flow. - See photos. - 11/18/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-135-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	TURTLE RIVER TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 3 NORTH MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 08' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	636350.8 5332954.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 37 67 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 40 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	54 Ft.	Other Special	N
49 Structure Length	111.88 Ft.	218 Channel Profile	1 48 07/20/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	212 Structure Load Rated	04/30/2018
52 Deck Width	30.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	2-Inspection Incomplete
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-135-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	1,089	100	1,087	0	0	0	2	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
Notes:Inspection not Complete due to High Water. See Photo. 10/14/2019. Minor spall area south outside beam near center pier. - 11/18/2019										
1110/2:Cracking (PSC)	ft	40	100	40	0	0	0	0	0	0
Notes:Inspection not completed due to High Water. See Photo. 10/14/2019. Minor cracks to top of beams in wheel path area. - 11/18/2019										
210/3:Re Conc Pier Wall	ft	62	89	55	11	7	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	7	0	0	100	7	0	0	0	0
Notes:Inspection not completed due to high water under structure. See Photo. 10/14/2019. Spalling under beams west side pier #2. - 11/18/2019										
215/2:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	100	1	0	0	0	0	0	0
Notes:Inspection not completed due to high water under structure. See Photo. 10/14/2019. Minor spall under south outside beam at west abutment. - 11/18/2019										
1130/2:Cracking (RC and Other)	ft	4	100	4	0	0	0	0	0	0
Notes:Inspection not Complete due to High Water under structure. See Photo. 10/14/2019. Minor vertical cracks both abutments. - 11/18/2019										
330/1:Metal Bridge Railing	ft	223	100	223	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	80	80	20	20	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	20	0	0	100	20	0	0	0	0
Notes:Minor peeling to coating on Railing. See Photo. - 11/18/2019										
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
Notes:Inspection not Complete due to High Water under structure. See Photo. 10/14/2019. - 11/18/2019										
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Slope protection displaced at the northwest corner of the west abutment with some minor undermine at this area. - 11/18/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Spall area to south outside beam near center of structure. Minor spalling west side top of center pier. Settlement of east abutment slope protection with some minor undermining near the northwest corner. Additional riprap placed along face & channel west abutment - piling no longer exposed. Top Surface and Metal Bridge Railing Inspection Completed. Superstructure and Substructure not complete due to High Water Under Structure. See Photo. Inspection complete 11/18/2019. - 11/18/2019

Alert Code 1: Channel bank erosion under structure in span #1. 10/2017 - Both slope protections settled and displaced. Some tree buildup south side center pier. - 11/18/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-135-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	26.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	TURTLE RIVER TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	EAST 2 NORTH MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 06' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	636380.4 5329766.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 12 22 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 8 16 Tons
208 Dk Overburden	1 None	70 Bridge Posting	1 30.0-39.9%below
Age and Service		209 Posted in "Tons"	22 Tons
27 Yr Built	1958	Appraisal	
106 Yr Reconstructed	2001	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	2 Intolerable - Replace
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25	72 App. Rdwy. Alignment	5 Above Tolerable
30 Year of ADT	2019	36 Traffic Safety Features	0 0 0 0
109 Average Daily Truck Traffic	-1.00	113 Scour Critical	U Unknown Scour
19 Bypass, Detour Length	2 Miles		
Geometric Data			
10 Min Vert Clearance	13 Ft. 6 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	November 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	Y 24 11/19/2019
47 Total Horizontal Clearance	16.4 Ft.	Underwater	N
48 Length of Max Span	66 Ft.	Other Special	N
49 Structure Length	71.85 Ft.	218 Channel Profile	1 48 05/09/2016
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	16.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	12 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 18-135-06.0

Structure Number: 18-135-06.0

[illegible]

Structure Number: 18-135-06.0

3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Loss of coating. - 11/19/2019										
332/1:Timb Bridge Railing	ft	144	100	144	0	0	0	0	0	0
7357/1:Pack Rust	each	1	0	0	100	1	0	0	0	0
Notes:Pack Rusting between connection plates and A-A and Top Chord. See Photo. Both Chord members. Pack rust developing at lower connection plates. See Photo and Alert Code 1. - 11/19/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: *Note:(1) Over cap between W. abutment & F beam 1 - 8 stringers with section loss to web. (1 ft) (2) Over cap between E. abutment & F beam 3 - 8 stringers with section loss to web. (1 ft) 1991 stringers were added where section loss has occurred. See deck sheet. NBI Remarks: Truss members very rusty. New deck in 2000. Embankment erosion around east wings. Utility cable hanging on north side of structure. Bridge div: changed alert code from 3 to 2 because the rusted beams were discounted when doing the load ratings. Height restriction signs of 13'-0" at each end. Channel Bank erosion around NE Wing. See Photo. Inspection incomplete due to High Water Under Structure. See Photo. 10/14/2019. Inspection completed 11/19/2019. Fracture Inspection Complete to Truss with no additional equipment used. Fracture Inspection to underside Truss Members not Completed due to High Water Under Structure. See Photo. 10/14/2019. Fracture Critical inspection completed to underside truss members with no additional equipment used. 11/19/2019. - 11/19/2019

Alert Code 1: Pack rust developing at L0 & L0' connection plates & B-B sections both ends. Severe rusting to lower portion of southeast can with some section loss at waterline. Pack Rust developing at connection plate L2 north side. Typical to all underside connection plates. - 11/19/2019

Alert Code 2: Very rusty stringers-some rusted thru the web. Additional I-beams added to panels 1 & 5 due to complete rusting thru of webs of adjacent stringers.(10 out of 21) Northeast can completely rusted thru near waterline with timber pile and concrete exposed, with approximately 70% section loss to the concrete @ the waterline. - 11/19/2019

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SEC 409

Structure Number: 18-135-06.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	48.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	TURTLE RIVER TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MORIAS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 1 EAST MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 06' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 08' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	637795.4 5329800.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 15 27 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 10 19 Tons
208 Dk Overburden	1 None	70 Bridge Posting	2 20.0-29.9%below
Age and Service		209 Posted in "Tons"	27 Tons
27 Yr Built	1950 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	2 Intolerable - Replace
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	13 Ft. 8 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	November 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	Y 24 11/19/2019
47 Total Horizontal Clearance	16.7 Ft.	Underwater	N
48 Length of Max Span	56 Ft.	Other Special	N
49 Structure Length	63.98 Ft.	218 Channel Profile	1 48 07/20/2015
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	13 Ft. 3 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 18-135-06.1

Structure Number: 18-135-06.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,087	100	1,087	0	0	0	0	0	0
113/2:Steel Stringer	ft	636	0	0	100	636	0	0	0	0
1000/2:Corrosion	ft	636	0	0	100	636	0	0	0	0
Notes:Inspection incomplete due to impassible roadway. See Photo. 10/14/2019. Rusting to all members. See Photo. - 11/19/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Loss of effectiveness. - 11/19/2019										
120/2:Steel Truss	ft	128	0	0	100	128	0	0	0	0
1000/2:Corrosion	ft	128	0	0	100	128	0	0	0	0
Notes:Inspection incomplete due to Impassible roadway. See Photo. 10/14/2019. Rusting to all members of the Truss. See Photo. - 11/19/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Areas of limited to no effectiveness. - 11/19/2019										
152/2:Steel Floor Beam	ft	79	0	0	100	79	0	0	0	0
1000/2:Corrosion	ft	79	0	0	100	79	0	0	0	0
Notes:Inspection incomplete due to Impassible Roadway. See Photo. 10/14/2019. Rusting to all areas of all Floor Beams. See Photo. - 11/19/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Limited to no effectiveness of coating. - 11/19/2019										
202/3:Steel Column	each	4	0	0	0	0	50	2	50	2
1000/3:Corrosion	each	4	0	0	0	0	50	2	50	2
Notes:Inspection incomplete due to Impassible Roadway. See Photo. 10/14/2019. - 11/19/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	50	50	50	50
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	50	50	50	50
Notes:No Effectiveness to the coating. - 11/19/2019										
206/3:Timber Column	each	8	100	8	0	0	0	0	0	0
216/3:Timber Abutment	ft	39	100	39	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	30	0	0	100	30	0	0	0	0
1000/2:Corrosion	ft	30	0	0	100	30	0	0	0	0
Notes:Inspection incomplete due to Impassible Roadway. See Photo. 10/14/2019. Rusting to all members of both caps. See Photo. - 11/19/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Limited to no effectiveness of the coating. - 11/19/2019										
330/1:Metal Bridge Railing	ft	128	0	0	0	0	91	116	9	12
1000/1:Corrosion	ft	116	0	0	0	0	100	116	0	0
Notes:Inspection incomplete due to Impassible Road. See Photo. 10/14/2019. Rusting to both railings. See Photo. - 11/19/2019										
7000/1:Damage	ft	12	0	0	0	0	0	0	100	12

Structure Number: 18-135-06.1

Notes: Vehicle damage to portion of South railing. See Photo. - 11/19/2019

515/1: Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1: Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100

Notes: No effectiveness to coating. - 11/19/2019

332/1: Timb Bridge Railing	ft	128	93	119	0	0	7	9	0	0
1140/1: Decay/Section Loss	ft	9	0	0	0	0	100	9	0	0

Notes: Inspection incomplete due to impassible roadway. See Photo. 10/14/2019. Section loss at all corners of Structure. See photo. - 11/19/2019

8401/3: Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Rotting of pile in SE wing. Upper and lower truss members very rusty. Rusty stringers. Vehicle damage to both railings and A-A section U1 to L11 North side. Height restriction signs of 13'-3" on each end. Beaver dam just south of Structure. 10/2017 - Severe channel bank erosion and ditch erosion near NE wing. See Photo. Inspection incomplete due to Roadway Impassible. See Photo. 10/14/2019. Inspection completed 11/19/2019. - 11/19/2019

Alert Code 1: Tree debris buildup against the SW abutment can. Large amount of tree debris in channel & under structure. Vehicle damage to U2-L2', L2-U2' north side and U1' L2 south side. Lower portion of entrance portal east side bent slightly. Section loss of approximately 1/8" to lower portion of all cans. - 11/19/2019

Fracture Critical: Fracture Critical Inspection not complete due to roadway impassible. See Photo. - 11/19/2019

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SEC 409

Structure Number: 18-135-21.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	BRANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01822 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ENGLISH COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 10 EAST EMERADO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.400	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 53' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 09' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	637092.6 5305656.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	450 30 Year of ADT 2013	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	6.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	32 Ft.	90 Date of Last Inspection	August 02, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.8 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CP-1822(91)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X8X68' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-135-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	135	100	135	0	0	0	0	0	0
Notes:_										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 8/2017 - Heavy vegetation in channel. Poor channel alignment to the south.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-135-21.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BRANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 4 NORTH MERRIFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 54' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 09' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	638006.4 5307273.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 25 45 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 15 27 Tons
208 Dk Overburden	23 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	110 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	November 27, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	21 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	1 48 05/23/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	07/25/2017
	29.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-135-21.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	710	80	570	20	140	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	140	0	0	100	140	0	0	0	0
Notes:Minor decay to underside of various deck planks. See Photo. - 11/27/2019										
107/2:Steel Opn Girder/Beam	ft	433	0	0	100	433	0	0	0	0
1000/2:Corrosion	ft	433	0	0	100	433	0	0	0	0
Notes:Rusting to all Girders. See photo. - 11/27/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	70	70	30	30	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	70	70	30	30	0	0
Notes:Rusting of girders due to loss of coating. - 11/27/2019										
111/2:Timber Open Girder	ft	121	100	121	0	0	0	0	0	0
206/2:Timber Column	each	16	94	15	6	1	0	0	0	0
1170/2:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes:Pile 4 South Abutment Split and open 3/4 at top. See Photo. - 11/27/2019										
216/2:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	49	0	0	100	49	0	0	0	0
1000/1:Corrosion	ft	49	0	0	100	49	0	0	0	0
Notes:Rusting to railing due to loss of coating in areas of peeling and flaking. See photo. - 11/27/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Peeling of coating causing rusting. See Photo. - 11/27/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb. Pile 4 from the west split at top and open to 3/4" at the south abutment. Minor rotting of deck planks underside of deck. 10/2015 - 24" metal culvert enters the channel near the SE wing. Inspection incomplete due to High water Under Structure. See Photo. 10/31/2019. Inspection completed 11/27/2019. - 11/27/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-135-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ALLENDALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 3 WEST THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 48' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	636938.5 5295968.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1995 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	19 Ft.	90 Date of Last Inspection	August 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	33.8 Ft.	Underwater	N
48 Length of Max Span	24 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 9FT.6IN.X6FT.5IN.X34' SPPA		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 18-135-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/2:Steel Culvert	ft	69	0	0	100	69	0	0	0	0
1000/2:Corrosion	ft	69	0	0	100	69	0	0	0	0
Notes:Freckled Rust. Corrosion of the steel has initiated. - 8/16/2019										
515/2:Steel Protective Coating	sq.ft	100	65	65	0	0	35	35	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	65	65	0	0	35	35	0	0
Notes:Minor corrosion, freckled rust lower portion both pipes. - 8/16/2019										

Remarks: NBI Remarks: Slight sag of approximately 0.3 in center of both culverts. Freckled rust to lower portion of culverts. Sag appears to be unchanged 2008. Channel cleanout south of structure in 2009. Heavy vegetation in channel both sides. - 8/16/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-135-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	66.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ALLENDALE TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH 2 WEST THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 45' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 09' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	638423.9 5291320.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 13 24 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 8 15 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	24 Gravel/Dirt	209 Posted in "Tons"	24 Tons
Age and Service		Appraisal	
27 Yr Built	1936 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	35 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 30, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	27 Ft.	218 Channel Profile	1 48 05/23/2017
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	07/25/2017
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-135-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	721	100	721	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	216	100	216	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
111/2:Timber Open Girder	ft	135	80	108	20	27	0	0	0	0
1150/2:Check/Shake	ft	27	0	0	100	27	0	0	0	0
Notes:Checking to Girder 11 from the West. See Photo. - 10/30/2019										
215/2:Re Conc Abutment	ft	39	100	39	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	59	100	59	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Minor peeling to both railing coatings. - 10/30/2019										
332/1:Timb Bridge Railing	ft	59	100	59	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [NBI Remarks: Minor horizontal checks in timber girder #11 from the west. Channel bank west side repaired in 2015. Some rotting wing planks. Vegetation in Channel Both ends. See Photo. - 10/30/2019

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SEC 409

Structure Number: 18-135-34.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	MICHIGAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COAL CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 2 NORTH REYNOLDS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 42' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 09' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	638556.0 5285084.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 53 96 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 32 58 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1951 106 Yr Reconstructed	2015	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	7 Above Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	25 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	2019	71 Waterway Adequacy	7 Above Minimum
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	8 Equal Desirable Crit
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	18 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	October 28, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	25.0 Ft.	Fracture Critical	N
48 Length of Max Span	21 Ft.	Underwater	N
49 Structure Length	23.00 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	218 Channel Profile	1 48 05/23/2017
	0.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb		207 Transporter Erector Routes and Sites	
	25.0 Ft.	212 Structure Load Rated	01/04/2016
52 Deck Width	26.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-135-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	598	100	598	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	328	100	328	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
111/2:Timber Open Girder	ft	103	100	103	0	0	0	0	0	0
206/3:Timber Column	each	14	93	13	7	1	0	0	0	0
1170/3:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes:Pile 1 South Abutment Split and open 1/2". - 10/28/2019										
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	46	100	46	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [] NBI Remarks:Top plank NW wing replaced in 2015. Some ice impact damage & pile #1 south abutment split & open 1/2" near the cap. 10/2015 - In 2015 county forces replaced girders,deck,W-beam railing and posts. Added riprap at both abutments. SW Top Plank damaged with section loss. See Photo. Volunteer Tree Growth near SE wing. - 10/28/2019

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Structure Number: 18-136-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	FERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MARAIS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 2 EAST MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 05' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 08' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	638028.8 5328194.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 33 61 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	November 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	96 Ft.	Other Special	N
49 Structure Length	100.07 Ft.	218 Channel Profile	1 48 05/06/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	04/30/2018
52 Deck Width	30.2 Ft.	213 Federal Aid Project Number	BRO-18(16)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-136-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,799	100	2,799	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	384	100	384	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	69	94	65	6	4	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	4	0	0	100	4	0	0	0	0
Notes:Minor vertical cracking with seepage and efflorescence. See Photo. - 11/19/2019										
1130/2:Cracking (RC and Other)	ft	7	100	7	0	0	0	0	0	0
Notes:CS 1 Vertical cracking to both abutments. Mainly at End Wall Joints. - 11/19/2019										
330/1:Metal Bridge Railing	ft	200	100	200	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/2:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/2:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Settlement of West Slope protection with minor undermining near center of West Abutment. - 11/19/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Vehicle damage to northeast corner of guardrail. Poor vertical roadway alignment from the east. Both slope protections settling with some undermining of the west abutment. 10/2017 - Tree growth near all wings. Tree Buildup south side of Structure. Inspection incomplete due to High Water. See Photo. 10/22/2019. Inspection completed 11/19/2019. - 11/19/2019

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Structure Number: 18-136-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	FERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MORIAS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST OF MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 04' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 08' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	638545.5 5326600.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 31 57 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 34 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	31 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	250 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 19, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.9 Ft.	Other Special	N
48 Length of Max Span	53 Ft.	218 Channel Profile	1 48 07/20/2015
49 Structure Length	55.12 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	04/30/2018
51 Bridge Rdwy Width - Curb to Curb	28.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-136-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	528	99	521	1	7	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	6	0	0	100	6	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. Spall southwest corner outside beam exposing tension cable. See Photo. - 11/19/2019										
1100/2:Exposed Prestressing	ft	1	0	0	100	1	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. Spall southwest corner outside beam exposing tension cable. See photo. - 11/19/2019										
215/3:Re Conc Abutment	ft	62	81	50	19	12	0	0	0	0
Notes:Inspection incomplete due to High Water. See photo. 10/22/2019. - 11/19/2019										
1130/3:Cracking (RC and Other)	ft	20	40	8	60	12	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. Vertical Cracks in both abutments. See Photo. - 11/19/2019										
330/1:Metal Bridge Railing	ft	108	100	108	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	54	83	45	17	9	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	7	0	0	100	7	0	0	0	0
Notes:Spalling to North Curb. See Photo. - 11/19/2019										
1090/1:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
Notes:Spalling with exposed rebar to Concrete Bridge Curb North Side. See Photo. - 11/19/2019										
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/1:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Slope protection settled and displaced both abutments. See Photo. - 11/19/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Minor diagonal cracking all wings. - 11/19/2019										

Remarks: NBI Remarks: Embankment erosion at wing corners. Minor cracks at wing corners. Vertical & horizontal cracks in both abutments. Spall southwest corner outside beam exposing tension cable. Diagonal cracks in all wings. Channel bank erosion down stream. 10/2015 / Slope protection has settled and displaced both abutments. Concrete Bridge Curb North Side Only. No Curb South Side. Inspection incomplete due to High Water. 10/22/2019. Inspection completed 11/19/2019. - 11/19/2019

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SEC 409

Structure Number: 18-136-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	31.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	FERRY TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MORIAS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 SOUTH MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 04' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 07' 37.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	639533.7 5325563.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	6 Bituminous	64 Oper. Rating	HS 10 18 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 6 12 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	18 Tons
27 Yr Built	1926 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	3 Intolerable - Correct
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	15 Ft. 4 In.	Inspections	
32 Approach Roadway Width	17 Ft.	90 Date of Last Inspection	November 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	Y 24 11/19/2019
47 Total Horizontal Clearance	17.1 Ft.	Underwater	N
48 Length of Max Span	90 Ft.	Other Special	N
49 Structure Length	91.86 Ft.	218 Channel Profile	1 48 05/06/2019
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	15 Ft. 1 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Structure Number: 18-136-09.0

Structure Number: 18-136-09.0

[illegible]

Structure Number: 18-136-09.0

Notes: Inspection incomplete due to High Water. See Photo. 10/22/2019. Loss of coating. No Effectiveness. - 11/19/2019											
330/1: Metal Bridge Railing	ft	184	0	0	0	0	100	184	0	0	0
1000/1: Corrosion	ft	172	0	0	0	0	100	172	0	0	0
Notes: Rusting to entire railing both sides. See photo. - 11/19/2019											
7000/1: Damage	ft	12	0	0	0	0	100	12	0	0	0
Notes: Damage to railing near SE Corner. See Photo. - 11/19/2019											
515/1: Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100	100
3440/1: Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100	100
Notes: Loss of effectiveness. No Coating. - 11/19/2019											
332/1: Timb Bridge Railing	ft	184	100	184	0	0	0	0	0	0	0
8398/3: Slope Protection	each	2	100	2	0	0	0	0	0	0	0
Notes: Inspection incomplete due to High Water. See Photo. 10/22/2019. - 11/19/2019											
8401/3: Wings	each	4	100	4	0	0	0	0	0	0	0

Remarks: Slight sag to all floorbeams. Poor channel alignment. Rusty stringers and truss members with minor section loss. Riprap added to both abutments. Vehicle damage to railings. Signed on both ends for clearance of 15' 1". Vehicle damage to truss repaired in 2004. Beaver dam and tree debris in channel just west of structure. New deck in 2002. Inspection incomplete due to High water. See Photo. 10/22/2019. Inspection completed 11/19/2019. - 11/19/2019

Alert Code 1: Bent D-D section L2 to L2' - East side. Some section loss to bottom flange stringer #2 and #3 along south abutment and all stringers at the north abutment. Section loss completely through web of stringer #2 @ the south abutment. Tree buildup East and underside of structure. See Photo. - 11/19/2019

Fracture Critical: Truss Section complete with no additional equipment used. Inspection incomplete To underside truss members due to High Water. See Photo. 10/22/2019. Truss and underside completed with Telescoping ladder and no additional equipment. 11/19/2019. - 11/19/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-136-09.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	43.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	FERRY TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 8 Service R	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 SOUTH MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 03' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 07' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	639528.1 5325017.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 9 16 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 6 12 Tons
208 Dk Overburden	1 None	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	14 Tons
27 Yr Built	1952 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	2 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	0 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.3 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	1 48 05/06/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	04/30/2018
	25.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-136-09.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	603	100	603	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	49	0	0	100	49	0	0	0	0
1000/2:Corrosion	ft	49	0	0	100	49	0	0	0	0
Notes:Rusting to all Girders. - 10/30/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Loss of Coating. No Effectiveness. - 10/30/2019										
111/2:Timber Open Girder	ft	456	0	0	0	0	90	408	11	48
1140/2:Decay/Section Loss	ft	456	0	0	0	0	90	408	11	48
Notes:Rotting of all Timber Girders. See Photos. Crushing of Timber Girder #17 near East Abutment. See Photo. - 10/30/2019										
206/3:Timber Column	each	12	100	12	0	0	0	0	0	0
216/3:Timber Abutment	ft	59	49	29	51	30	0	0	0	0
1900/3:Distortion	ft	30	0	0	100	30	0	0	0	0
Notes:East Abutment inward movement. No Measurements taken. - 10/30/2019										
235/2:Timber Pier Cap	ft	59	36	21	64	38	0	0	0	0
1150/2:Check/Shake	ft	8	0	0	100	8	0	0	0	0
Notes:Minor check/shake to west Abutment cap. - 10/30/2019										
1900/2:Distortion	ft	30	0	0	100	30	0	0	0	0
Notes:Inward movement of east abutment causing tilting away of abutment cap & top backwall plank. - 10/30/2019										
332/1:Timb Bridge Railing	ft	49	90	44	10	5	0	0	0	0
Notes:Minor decay to South railing near SE Corner. - 10/30/2019										
1140/1:Decay/Section Loss	ft	5	0	0	100	5	0	0	0	0
Notes:Minor decay to South Railing near SE Corner. - 10/30/2019										
4000/1:Settlement	each	1	100	1	0	0	0	0	0	0
Notes:East Abutment moving inward. See Alert Code 2. - 10/30/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: No railing. - 10/30/2019

Alert Code 1: Girder #17 from the north rotted and crushed at the east abutment. Roadway embankment settling behind the SW corner of the west abutment, approximately 2' wide by 1' deep. Bump @ both ends of bridge. Scour hole along west abutment 30' x 10' x 2.0' deep. - 10/30/2019

Alert Code 2: All timber girders showing signs of rot. Inward movement of east abutment causing tilting away of abutment cap & top backwall plank. - 10/30/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-136-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	RYE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 NO. GRAND FORKS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 56' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 07' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	639542.0 5311386.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 27 50 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 12 23 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1996 106 Yr Reconstructed	2000	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	5 Above Min Tolerable
28 Lanes on Structure	2	68 Deck Geometry	7 Above Min Criteria
29 ADT	70 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	-1.00	71 Waterway Adequacy	8 Equal Desirable
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	8 Equal Desirable Crit
Geometric Data		36 Traffic Safety Features	1 1 1 1
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	30 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	October 23, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	29.2 Ft.	Fracture Critical	N
48 Length of Max Span	43 Ft.	Underwater	N
49 Structure Length	45.93 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	218 Channel Profile	1 48 05/23/2017
	0.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	29.5 Ft.	207 Transporter Erector Routes and Sites	-1
52 Deck Width	32.2 Ft.	212 Structure Load Rated	01/09/2018
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Nefstead, Fischer
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-136-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,324	99	1,311	0	0	1	13	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	13	0	0	0	0	100	13	0	0
Notes:Minor spalling to Bridge Deck. See Photo. - 10/23/2019										
1130/1:Cracking (RC and Other)	sq.ft	10	100	10	0	0	0	0	0	0
Notes:Minor cracking to deck. No Photo taken. CS 1 cracks. - 10/23/2019										
520/1:Conc Re Prot Sys	sq.ft	1,324	100	1,324	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	367	100	367	0	0	0	0	0	0
206/2:Timber Column	each	18	100	18	0	0	0	0	0	0
216/2:Timber Abutment	ft	69	100	69	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	69	51	35	49	34	0	0	0	0
1900/2:Distortion	ft	34	0	0	100	34	0	0	0	0
Notes:North abutment cap sags 1" at center. - 10/23/2019										
321/1:Re Conc Approach Slab	sq.ft	2,360	100	2,360	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	89	89	79	0	0	11	10	0	0
1080/1:Delamination/Spall/Patched Area	ft	10	0	0	0	0	100	10	0	0
Notes:Spalling to SW Corner of Barrier. See Photo. - 10/23/2019										
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
Notes:Scour hole under structure 20' x 50' x 2' deep. See Alert Code 1. - 10/23/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10/2017 - County placed a concrete deck on top of existing T-girders. Jersey barrier approach slabs and standard guardrail were added in 2000. Deck varies in thickness from 9" south side to 1' to 6" on the north end. Vehicle damage to SW guardrail, west side barrier and 1 broken post at the NE end terminal. North abutment cap sags 1" near center. South channel bank west of structure sloughing. Portion of old structure in channel. NW Safety Shape pulling away from Barrier. Bump Sign on south end for South Traffic - 10/23/2019

Alert Code 1: 5/2017 - Scour hole under structure 20' x 50' x 2' deep. 10/2017 - Bump at south end of bridge due to poor horizontal alignment of approach concrete. - 10/23/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-136-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BRANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 4 NORTH MERRIFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 54' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 07' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	639631.0 5307306.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 31 57 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 18 34 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1991 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	40 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 27, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	29.2 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/23/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.5 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.5 Ft Lt-Side	212 Structure Load Rated	07/25/2017
51 Bridge Rdwy Width - Curb to Curb	29.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-136-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	732	100	732	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	440	73	320	27	120	0	0	0	0
1000/2:Corrosion	ft	120	0	0	100	120	0	0	0	0
Notes:Minor rust to the bottom flange of most beams- see photo. - 8/27/2019										
515/2:Steel Protective Coating	sq.ft	100	80	80	20	20	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	80	80	20	20	0	0	0	0
Notes:Minor rusting to the bottom flanges of most beams. - 8/27/2019										
111/2:Timber Open Girder	ft	121	100	121	0	0	0	0	0	0
206/2:Timber Column	each	18	100	18	0	0	0	0	0	0
216/2:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb. Minor crack in east outside pile at the south abutment open to approximately 1/4". 8/2015
 - Rip rap placed in channel and along both abutments. 8/2017 - Some minor rust to bottom flange most beams.
 Heavy vegetation in channel. English coulee diversion structures just east of structure. - 8/27/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-136-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BRANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NGLISH COULEE DIVERSION	102 Direction of Traffic	2 2-way traffic
09 Location	2 W 4 S JCT US 2 & I-29	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 52' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 07' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	639707.7 5304098.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2003 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2013	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	August 01, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.7 Ft.	Underwater	N
48 Length of Max Span	21 Ft.	Other Special	N
49 Structure Length	42.98 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DACW37-02-C-0004 STR #15
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 15X5X130' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-136-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	260	98	256	2	4	0	0	0	0
Notes: _										
1130/1:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes: _										
8398/4:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/4:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor vertical cracks in both headwalls. Riprap added at all wing corners & south channel bank downstream.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-136-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	66.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ALLENDALE TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH 1 WEST THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 46' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 07' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	640012.1 5292163.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 17 31 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 10 19 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	26 Gravel/Dirt	209 Posted in "Tons"	31 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed	1986	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	69 30 Year of ADT	2019	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.5 Ft.	Underwater	N
48 Length of Max Span	33 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	1 48 05/23/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.5 Ft.	212 Structure Load Rated	07/25/2017
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-136-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,033	100	1,033	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	614	0	0	95	581	5	33	0	0
1000/2:Corrosion	ft	614	0	0	95	581	5	33	0	0
Notes:Rusting to all Girders. See Photo. - 10/30/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	50	50	50	50	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	50	50	50	50	0	0
Notes:Loss of Coating. No Effectiveness. - 10/30/2019										
111/2:Timber Open Girder	ft	144	100	144	0	0	0	0	0	0
206/2:Timber Column	each	8	100	8	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	43	0	0	47	20	40	17	14	6
1080/2:Delamination/Spall/Patched Area	ft	37	0	0	54	20	46	17	0	0
Notes:Spalling with section loss along bottom of Both Abutments. See Photos. - 10/30/2019										
1130/2:Cracking (RC and Other)	ft	3	0	0	0	0	0	0	100	3
Notes:Large Crack to East Abutment. - 10/30/2019										
4000/2:Settlement	ft	3	0	0	0	0	0	0	100	3
Notes:East and west outside 2' of the south abutment dropped and not supporting timber cap. See Photo and Alert Code 1. - 10/30/2019										
216/2:Timber Abutment	ft	20	100	20	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	72	97	70	0	0	3	2	0	0
1140/1:Decay/Section Loss	ft	2	0	0	0	0	100	2	0	0
Notes:Section Loss to West Curb. - 10/30/2019										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/3:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Both Slope Protection Settled. - 10/30/2019										
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
1170/2:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes:Rotting and Split Pile at SE Wing. - 10/30/2019										

Remarks: Date 11/24/2003 - Section of abutment with corroding rebar exposed. 12-28-2005 - Outside (2 ft) corners of original concrete abutments dropped and broke out. (no longer supporting widening) see photos. [NBI Remarks: No railing. Rusty girders. Vertical cracks in abutments. Some minor rotting of southeast wing pile. Northeast wing pile rotted and broke. - 10/30/2019

Alert Code 1: East and west outside 2' of the south abutment dropped and not supporting timber cap. Lower portion of both abutments have concrete deterioration with up to 1 1/2" of section loss and exposed rebar at the south abutment. Approximately twenty percent section loss to the bottom flange of east outside girder at various areas and at the north abutment. - 10/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-136-34.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	MICHIGAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 4 SOUTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 42' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 07' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	640150.5 5285983.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 13.5 (HS 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 28 50 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 30 Tons
208 Dk Overburden	24 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 28, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.5 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	1 48 05/23/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	30.8 Ft.	212 Structure Load Rated	12/06/2017
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-136-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	299	99	296	1	3	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:Spalling east outside beam near NE Corner. See Photo. - 10/28/2019										
206/2:Timber Column	each	18	100	18	0	0	0	0	0	0
216/2:Timber Abutment	ft	69	100	69	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	69	100	69	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	62	100	62	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Rip Rap displaced center of North Abutment to the East. See Photo. - 10/28/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Vertical hairline cracks starting about 5 ft. from abutment seat then every foot across beam to within 5 ft. of opposite abutment. (all beams). Rip Rap displaced center of North Abutment to the East. See photo. Rip Rap placed along south bank down stream into Farmstead. - 10/28/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-09.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	25.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	FERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MORIAS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 1 SOUTH MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 03' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 06' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	640532.6 5325044.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 10 18 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 7 13 Tons
208 Dk Overburden	1 None	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	17 Tons
27 Yr Built	1926 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	2 Intolerable - Replace
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	3 Intolerable - Correct
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	13 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	November 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	Y 24 11/19/2019
47 Total Horizontal Clearance	16.7 Ft.	Underwater	N
48 Length of Max Span	75 Ft.	Other Special	N
49 Structure Length	79.07 Ft.	218 Channel Profile	1 48 07/20/2015
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	13 Ft. 7 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-09.1

Structure Number: 18-137-09.1

[illegible]

Structure Number: 18-137-09.1

1000/2:Corrosion	ft	30	0	0	0	0	100	30	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. - 11/19/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. - 11/19/2019										
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. - 11/19/2019										
330/1:Metal Bridge Railing	ft	157	0	0	26	40	75	117	0	0
1000/1:Corrosion	ft	117	0	0	0	0	100	117	0	0
Notes:Rusting to both railing. See Photo. - 11/19/2019										
7000/1:Damage	ft	40	0	0	100	40	0	0	0	0
Notes:Damage to West Railing. See Photo. - 11/19/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Loss of effectiveness. No Coating. - 11/19/2019										
332/1:Timb Bridge Railing	ft	157	92	145	0	0	8	12	0	0
1170/1:Split/Delamination (Timber)	ft	12	0	0	0	0	100	12	0	0
Notes:Split to West Curb in two areas near NW Corner. See Photo. - 11/19/2019										
7357/1:Pack Rust	each	1	100	1	0	0	0	0	0	0
7362/2:Superstructure Traffic Impact	each	1	0	0	100	1	0	0	0	0
Notes:High load impact damage to the upper chord brace 2nd from the north. See Photo. See Alert Code 2. - 11/19/2019										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1140/3:Decay/Section Loss	each	4	0	0	100	4	0	0	0	0
Notes:Decay section loss to all wings. Mainly near the waterline. - 11/19/2019										

Remarks: Some deck planks replaced north half. Rusty truss members & stringers. All cans rusting at the lower portion with some minor section loss & inward movement of the north end cans. Vehicle damage to both railings. Poor horizontal roadway alignment. Minor impact damage to north entrance portal. Channel bank erosion both banks both sides of structure. Height restriction signs of 13' 7" missing both ends. Inspection incomplete due to High Water. See Photo. 10/22/2019. Inspection completed 11/19/2019. - 11/19/2019

Alert Code 1: Stringer 6 from the west in panel #3 span, misaligned and moving south with only 1 1/2" sitting on the floor beam. Lower portion of can completely rusted through @ the SW corner. Vehicle damage to NE railing. Tree debris under structure with some lodged in stringers & lower lateral braces near north abutment. Pack rust developing @ most lower connection plates. Tree debris buildup under and both sides of structure restricting flow. See photo. Connection separating to South two cans. See Photo. - 11/19/2019

Alert Code 2: Bent E-E sections U1-L2, U2-L2', L2'-U1' both sides. Bent A-A section U1-L1 rt. side. High load impact damage to the upper chord brace 2nd from the north. Bent D-D section east side from floorbeams 3-4. - 11/19/2019

Fracture Critical: Truss Inspection completed with no additional equipment used. Lower portion of truss Inspection incomplete due to High Water. See Photo. 10/22/2019. Lower portion of Truss complete with telescoping ladder and no additional equipment. 11/19/2019. - 11/19/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	FERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MORIAS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 2 SOUTH MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 03' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 06' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	641147.9 5324565.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 50 91 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 28 52 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1987 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.2 Ft.	Underwater	N
48 Length of Max Span	62 Ft.	Other Special	N
49 Structure Length	129.92 Ft.	218 Channel Profile	1 48 05/06/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	04/30/2018
	30.5 Ft.	213 Federal Aid Project Number	BRO-18(9)
52 Deck Width	32.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-137-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,230	100	4,230	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	502	100	502	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	36	100	36	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	75	100	75	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	259	99	255	2	4	0	0	0	0
7000/1:Damage	ft	4	0	0	100	4	0	0	0	0
Notes:Vehicle damage to both sides of railing. See Photo. - 11/21/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor channel bank erosion both banks both sides of structure. Minor vehicle damage to both railings. Ditch erosion where it enters the Channel near the NW Wing. See Photo. Volunteer Tree Growth near NW Wing. See Photo. Inspection incomplete due to High Water. See Photo. 10/22/2019. Inspection Completed 11/21/2019. - 11/21/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	RYE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE DITCH #18	102 Direction of Traffic	2 2-way traffic
09 Location	1 W 2 NORTH GRAND FORKS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 57' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 06' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	641104.7 5313787.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 60 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 36 Tons
208 Dk Overburden	22 Gravel/Dir	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1962 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.6 Ft.	Underwater	N
48 Length of Max Span	58 Ft.	Other Special	N
49 Structure Length	61.02 Ft.	218 Channel Profile	1 48 05/23/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	04/30/2018
	25.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-137-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	522	95	497	4	23	0	2	0	0
1080/2:Delamination/Spall/Patched Area	ft	25	0	0	92	23	8	2	0	0
Notes:Areas of rifle fire damage to the west outside girder - see photo - 8/23/2019										
206/3:Timber Column	each	20	95	19	0	0	5	1	0	0
1180/3:Abrasion	each	1	0	0	0	0	100	1	0	0
Notes:Ice impact damage to the top of the east outside pile north abutment - see photo. - 8/23/2019										
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	121	92	111	8	10	0	0	0	0
7000/1:Damage	ft	10	0	0	100	10	0	0	0	0
Notes:Minor vehicle damage to the west rail w/ one cracked post - see photo of cracked post. - 8/23/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	121	95	115	5	6	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
Notes:Minor areas of rifle fire damage to the outside portion of the west curb. - 8/23/2019										
1090/1:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:Exposed rebar east curb near north end - see photo. - 8/23/2019										
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/1:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Slope protection has settled at both abutments. - 8/23/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Rifle fire damage to rail, posts, and west outside girder #1. Rotted wing pile S.W. wing. One cracked guardrail post-west side. Minor ice damage to east outside pile north abutment. Poor horizontal roadway alignment from the south. Riprap displaced along south abutment. Top Southwest wing plank missing, southeast top wing plank cracked. - 8/23/2019

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SEC 409

Structure Number: 18-137-17.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	25 Other Local Agencies
02 Highway District	Grand Forks District	22 Owner	25 Other Local Agencies
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	RYE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NGLISH COULEE DIVERSION	102 Direction of Traffic	2 2-way traffic
09 Location	1 W 1 N GRAND FORKS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 56' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 06' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	641127.1 5312200.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2003 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2013	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	November 01, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.0 Ft.	Underwater	N
48 Length of Max Span	15 Ft.	Other Special	N
49 Structure Length	63.98 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DACW37-02-C-0004 STR. # 7
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD, 15X10X58' PRECAST RCB		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-17.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	232	100	232	0	0	0	0	0	0
Notes: _										
8398/4:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/4:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Thirty six inch pipe enters channel at the southwest wing corner. Some vertical cracks in both headwalls with seepage. Minor roadway filtration east barrel.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	RYE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 8 Service R 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect NGLISH COULEE DIVERSION		102 Direction of Traffic	2 2-way traffic
09 Location	1 W 1 N GRAND FORKS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 56' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 06' 37.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 641138.4 5311485.9		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 2003 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 2 30 Year of ADT 2013		71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	0 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	34 Ft.	90 Date of Last Inspection	August 25, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	33.8 Ft.	Underwater	N
48 Length of Max Span	15 Ft.	Other Special	N
49 Structure Length	63.98 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DACW37-02-C-0004 STR. #9
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD, 15X10X52' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	208	97	202	0	0	3	6	0	0
Notes: _										
1130/1:Cracking (RC and Other)	ft	30	100	30	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor vertical cracks north end parapet. 8/2015 - Areas of spalling south end floor where south end of concrete apron has heaved.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-19.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BRANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NGLISH COULEE DIVERSION	102 Direction of Traffic	2 2-way traffic
09 Location	2 W 1 S JCT US 2 & I 29	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 55' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 07' 52.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	639616.7 5309371.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2003 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	250 30 Year of ADT 2013	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	August 11, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	43.96 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DACW37-02-C-0004
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD, 10X9X90' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 18-137-19.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	360	99	356	1	4	0	0	0	0
Notes: _										
1130/1:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes: _										
8398/4:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [] NBI Remarks: Minor vertical cracks in both headwalls. Riprap placed @ all 4 wing corners. 8/2015 - Rust staining at all lift hole locations.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-19.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BRANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NGLISH COULEE DIVERSION	102 Direction of Traffic	2 2-way traffic
09 Location	2 W 1 S JCT US 2 & I-29	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 55' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 07' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	639616.7 5308918.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2003 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	250 30 Year of ADT 2013	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	August 11, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	43.96 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DACW37-02-C-02-0004 STR # 11
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD, 10X8X77' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-19.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	308	100	308	0	0	0	0	0	0
Notes: _										
1130/1:Cracking (RC and Other)	ft	12	100	12	0	0	0	0	0	0
Notes: _										
8398/4:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/4:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Riprap added to all wing corners. Minor spall area lower portion NW wing. Some roadway filtration east side lower portion barrel #2 near the south end, thru 3 culvert sections.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Urban, Local
04 City	BRANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NGLISH COULEE DIVERSION	102 Direction of Traffic	2 2-way traffic
09 Location	2 W 2 S JCT US 2 & I-29	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 54' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 07' 52.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	639668.7 5307319.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2003 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2013	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	August 01, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.7 Ft.	Underwater	N
48 Length of Max Span	15 Ft.	Other Special	N
49 Structure Length	63.98 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DACW37-02-C-0004 STR # 12
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD, 15X5X56' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	224	96	214	4	10	0	0	0	0
Notes: _										
1080/1:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
Notes: _										
8398/4:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/4:Wings	each	4	100	4	0	0	0	0	0	0
8403/3:Drop Inlet	each	1	100	1	0	0	0	0	0	0

Remarks: Minor vertical cracks in drop inlet & headwalls. Additional riprap added in channel north end & @ all wing corners. Two minor spalls on floor south end of 3rd barrel from the west. Grout failure between barrels 1 & 2 north end floor. 8/2015 - Cast in place floor at north end heaving causing spalling to the floor of the north barrel.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-21.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	BRANNA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01822 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NGLISH COULEE DIVERSION	102 Direction of Traffic	2 2-way traffic
09 Location	2 W 3 S JCT US 2 & I-29	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.010	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 53' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 07' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	639691.4 5305716.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2003 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2013	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	40 Ft.	90 Date of Last Inspection	August 01, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	N
48 Length of Max Span	15 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DACW37-02-C-0004 STR. # 14
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 15X5X77' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-21.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/4:Re Conc Culvert Precast	ft	154	100	154	0	0	0	0	0	0
Notes:_										
8398/4:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/4:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Riprap placed @ all wing corners. 8/2017 - Heavy vegetation in channel.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-25.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ALLENDALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH MERRIFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 50' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 06' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	641432.1 5300169.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1966 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	160 30 Year of ADT 2013	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 01, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 7'X5'X46' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-25.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	92	97	89	3	3	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes: _										
1130/2:Cracking (RC and Other)	ft	4	75	3	25	1	0	0	0	0
Notes: _										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor cracks in outside walls & wing corners.**Alert Code 1:** Scour hole east side just off culvert end - 2' x 10' x 50'.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-25.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LEGAL DRAIN NO. 4	102 Direction of Traffic	2 2-way traffic
09 Location	SOUTH EDGE OF MERRIFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 50' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 06' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	641441.5 5300877.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	0 Tons
27 Yr Built	2009 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	160 30 Year of ADT 2013	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	August 01, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	21.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	51.84 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 10' X 5' X52' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-25.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	104	100	104	0	0	0	0	0	0
Notes:_										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/4:Wings	each	4	100	4	0	0	0	0	0	0

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	ALLENDALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELM COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	CITY THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 46' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 06' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	641617.8 5292443.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	275 30 Year of ADT 2013	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 12, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 05/23/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-18(14)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10'X8'X44' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	131	100	131	0	0	0	0	0	0
1130/3:Cracking (RC and Other)	ft	10	100	10	0	0	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [] NBI Remarks: Minor diagonal cracks in all wings. Heavy vegetation in channel both sides with some tree growth in channel. 10/2017 - Beaver dam just east of structure.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-33.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	83.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	MICHIGAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 4 SOUTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 42' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 07' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	641065.1 5286402.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 28 51 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 31 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	30 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 28, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	26.9 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	1 48 05/23/2017
49 Structure Length	36.09 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	04/30/2018
51 Bridge Rdwy Width - Curb to Curb	27.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-137-33.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	305	100	305	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	59	0	0	95	56	5	3	0	0
1130/2:Cracking (RC and Other)	ft	59	0	0	95	56	5	3	0	0
Notes:U-Shape cracking to both Abutments. See Photo. - 10/28/2019										
330/1:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Rip Rap Displaced along East Abutment. - 10/28/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [] NBI Remarks: West abutment leans back 1" in 4' measured at center. East abutment leans back 1/2" in 4' measured at center. Minor u-shaped cracking in east abutment. Slight inward movement of both abutments. No change in lean in 2011,2013, 2015, 2017, or 2019. Large scour hole downstream, approximately 60' x 150' x 4' deep. Rip Rap Displaced along East Abutment. - 10/28/2019

Alert Code 1: West abutment bowed outward with spalling at upper northwest corner. U-shaped cracking in abutment. 5/2017 - Scour hole under structure 60' x 150' x 4' deep. See Photo. - 10/28/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-137-33.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	MICHIGAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 06' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	641761.0 5288023.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 40 72 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 24 43 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	180 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 20, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	29.2 Ft.	Other Special	N
48 Length of Max Span	32 Ft.	218 Channel Profile	1 48 05/23/2017
49 Structure Length	40.03 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	05/02/2018
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-137-33.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	883	100	883	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	79	81	64	19	15	0	0	0	0
Notes:Inspection Incomplete due to High Water Under Structure. See Photo. 10/30/2019. - 11/20/2019										
1080/2:Delamination/Spall/Patched Area	ft	15	0	0	100	15	0	0	0	0
Notes:Inspection Incomplete due to High Water Under Structure. See Photo. 10/30/2019. Patched West Outside Girder with Concrete and Metal Plate. See Photo. - 11/20/2019										
110/2:Re Conc Opn Girder/Beam	ft	161	96	154	0	0	4	7	0	0
1090/2:Exposed Rebar	ft	7	0	0	0	0	100	7	0	0
Notes:Inspection Incomplete due to High Water Under Structure. See Photo. 10/30/2019. Spalling with exposed rebar to West outside Concrete Girder. See Photo. - 11/20/2019										
215/3:Re Conc Abutment	ft	52	62	32	12	6	27	14	0	0
1080/3:Delamination/Spall/Patched Area	ft	11	0	0	0	0	100	11	0	0
Notes:Inspection Incomplete due to High Water Under Structure. See Photo. 10/30/2019. Spalling to south abutment diaphragm. See Photo. - 11/20/2019										
1090/3:Exposed Rebar	ft	3	0	0	0	0	100	3	0	0
Notes:Inspection Incomplete due to High Water Under Structure. See Photo. 10/30/2019. Spalling on backwall of south abutment under beams, with section loss up to 2" with some exposed rebar. - 11/20/2019										
1130/3:Cracking (RC and Other)	ft	6	0	0	100	6	0	0	0	0
Notes:Inspection Incomplete due to High Water Under Structure. See Photo. 10/30/2019. Vertical cracking to both Abutments. See photo. - 11/20/2019										
330/1:Metal Bridge Railing	ft	79	100	79	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
4000/1:Settlement	each	1	100	1	0	0	0	0	0	0
Notes:Inspection Incomplete due to High Water Under Structure. See Photo. 10/30/2019. - 11/20/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Spalling on backwall of south abutment under beams, with section loss up to 2" with some exposed rebar. Poor horizontal roadway alignment. No curb. Vertical and diagonal cracks in the south abutment. North abutment moving inward 1" and south abutment 1 1/2". Curve Arrow & 30 MPH advisory speed limit signs both ends. 10/2015 - Spalling to south abutment diaphragm. County forces repaired west outside t beam by attaching metal plate to the west vertical leg and encase concrete. See photos. - 11/20/2019

Alert Code 1: Spall area to west girder with exposed rebar. - 11/20/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-138-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	88.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	FERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MORIAS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 2 SOUTH MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 02' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 05' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	642189.3 5323432.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 22 40 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 14 26 Tons
208 Dk Overburden	25 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1950 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.9 Ft.	Underwater	N
48 Length of Max Span	36 Ft.	Other Special	N
49 Structure Length	38.06 Ft.	218 Channel Profile	1 48 05/02/2019
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	27.2 Ft.	212 Structure Load Rated	12/06/2017
52 Deck Width	28.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-138-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,076	100	1,076	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	535	0	0	100	535	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. - 11/21/2019										
1000/2:Corrosion	ft	535	0	0	100	535	0	0	0	0
Notes:Rusting to all Girders. Inspection incomplete due to High Water. See Photo. 10/22/2019. - 11/21/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Loss of effectiveness. No Coating. - 11/21/2019										
111/2:Timber Open Girder	ft	154	100	154	0	0	0	0	0	0
206/2:Timber Column	each	14	93	13	0	0	7	1	0	0
1170/2:Split/Delamination (Timber)	each	1	0	0	0	0	100	1	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. Pile 7 East Abutment open at the top and open 1" at the top. See Photo. - 11/21/2019										
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	94	62	6	4	0	0	0	0
1150/2:Check/Shake	ft	4	0	0	100	4	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. Check shake near SE Corner of East Abutment. See Photo. - 11/21/2019										
330/1:Metal Bridge Railing	ft	75	100	75	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	75	100	75	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor fire damage to S.W. Wing. South outside pile at east abutment split at top and open to 3/4" with minor ice impact damage. Additional opening observed at 1" to Pile. Old Piling in Channel. See Photo. Volunteer Tree growth near NE and SE Corner. See Photo. Tree Debris lodged under structure. No Photo Taken due to High Water. Tree drift buildup under Structure near West Abutment. See Photo. Underside Inspection incomplete due to High Water. See Photo. 10/22/2019. Inspection Completed 11/21/2019. - 11/21/2019

Structure Number: 18-138-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	FERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MORIAS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 3 SOUTH MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 02' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 05' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	642802.5 5322629.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 46 83 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1984 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	85 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	November 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.5 Ft.	Underwater	N
48 Length of Max Span	80 Ft.	Other Special	N
49 Structure Length	85.96 Ft.	218 Channel Profile	1 48 05/02/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	212 Structure Load Rated	05/02/2018
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	BRO-18(11)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-138-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	801	100	801	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	85	100	85	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	171	100	171	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb. Diagonal crack top of SW wing. Volunteer Tree Growth SE an SW wings. See Photo.
 Inspection incomplete due to High Water. See Photo. 10/22/2019. Inspection completed 11/21/2019. -
 11/21/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-138-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	WALLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAT OF MERRIFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 50' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 05' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	643008.3 5300917.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2003 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2013	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	August 01, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	21.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X6X60' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-138-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	120	98	117	3	3	0	0	0	0
Notes: _										
1085/1:Delamination	ft	3	0	0	100	3	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Vegetation in channel both ends.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-138-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	WALLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST OF THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 46' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 05' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	643205.0 5293061.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 31 57 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 34 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2003 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	September 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	33.1 Ft.	Underwater	N
48 Length of Max Span	37 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	1 48 04/30/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	05/02/2018
	31.8 Ft.	213 Federal Aid Project Number	
52 Deck Width	33.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-138-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	370	94	349	6	21	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
Notes:Spalling to East Beam near both North and South Abutment. Spalling to underside of West Beam near South Abutment. See Photos. - 9/20/2019										
1110/1:Cracking (PSC)	ft	16	0	0	100	16	0	0	0	0
Notes:Diagonal and horizontal cracking to East and West Outside Beams. - 9/20/2019										
215/3:Re Conc Abutment	ft	76	87	66	13	10	0	0	0	0
Notes:Vertical cracking to both North and South Abutments. See Photo. - 9/20/2019										
1130/3:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
330/1:Metal Bridge Railing	ft	80	100	80	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	80	96	77	0	0	4	3	0	0
1090/1:Exposed Rebar	ft	3	0	0	0	0	100	3	0	0
Notes:Spalling with exposed rebar to section near SW Corner of Bridge. See Photo. - 9/20/2019										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: New structure constructed in 2003 with adjacent beams from old structure 18-142-30.0 [] NBI Remarks: Concrete spall areas to bottom edge of east outside beam and two spalled areas on underside of east outside beam. One minor spall area to underside of west outside beam. 9/29/2017 - Slope protection south side only. Spall area with exposed rebar west curb.Volunteer Tree Growth near SE and NE Wings. See Photo. - 9/20/2019

Alert Code 1: One vertical crack in center of east outside beam open to approximately 1/16". Longitudinal cracks underside of both west outside beams. - 9/20/2019

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SEC 409

Structure Number: 18-138-32.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	AMERICUS TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 2 SOUTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 44' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 05' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	643301.7 5288922.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 34 62 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 25 45 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	120 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 30, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	25.6 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/23/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	05/02/2018
51 Bridge Rdwy Width - Curb to Curb	25.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 18-138-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/2:Timber Slab	sq.ft	635	100	635	0	0	0	0	0	0
206/2:Timber Column	each	12	100	12	0	0	0	0	0	0
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	49	76	37	25	12	0	0	0	0
1900/1:Distortion	ft	12	0	0	100	12	0	0	0	0
Notes:East Rail leaning due to damage of Curb near SE End. See Photo. - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	49	63	31	37	18	0	0	0	0
1140/1:Decay/Section Loss	ft	6	0	0	100	6	0	0	0	0
Notes:Section loss to West Curb near mid length. See Photo. See Photo. - 10/30/2019										
7000/1:Damage	ft	12	0	0	100	12	0	0	0	0
Notes:Damage to East Curb near SE Corner. See Photo. - 10/30/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [] NBI Remarks: Top backwall plank tilting back - south abutment. Some rotting wing piles. 10/2015 - Pile 4 south abutment supports 1/2 the cap. - 10/30/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-139-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	66.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	FERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MORIAS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 3 SOUTH MANVEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 02' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 04' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	643542.4 5321859.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 11 21 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 8 15 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	17 Tons
Age and Service		Appraisal	
27 Yr Built	1926 106 Yr Reconstructed 1968	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	2 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 21, 2019
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	15.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.6 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	1 48 05/02/2019
49 Structure Length	37.07 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	05/02/2018
51 Bridge Rdwy Width - Curb to Curb	22.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-139-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	872	100	872	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	72	0	0	72	52	28	20	0	0
1000/2:Corrosion	ft	72	0	0	72	52	28	20	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. Rusting to all Girders with minor pitting. See Photo. - 11/21/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. No coating. Loss of Effectiveness. - 11/21/2019										
111/2:Timber Open Girder	ft	404	100	404	0	0	0	0	0	0
206/3:Timber Column	each	4	50	2	25	1	25	1	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. - 11/21/2019										
1140/3:Decay/Section Loss	each	1	0	0	0	0	100	1	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. Decay section loss to NE Column. See Photo. - 11/21/2019										
1170/3:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. Split to to of SE Column. - 11/21/2019										
215/3:Re Conc Abutment	ft	43	49	21	35	15	16	7	0	0
1080/3:Delamination/Spall/Patched Area	ft	15	0	0	100	15	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. Spalling to both Abutments. See photo. - 11/21/2019										
1090/3:Exposed Rebar	ft	7	0	0	0	0	100	7	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. Spalling with exposed rebar at East Abutment. - 11/21/2019										
216/3:Timber Abutment	ft	13	100	13	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	56	95	53	5	3	0	0	0	0
1140/2:Decay/Section Loss	ft	3	0	0	100	3	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/22/2019. Section loss from crushing near SE Corner. See Photo. - 11/21/2019										
330/1:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Spalls with exposed rebar on both abutments. Rusty girders. Some roadway embankment filtering thru lower portion between timber and concrete abutments. Both abutment footing exposed. Some crushing & cracking south end east abutment cap. Top plank SW wing cracked & rotting. Old piling in center of channel under structure. 10/2017 - Channel bank erosion downstream both banks. Tree Drift Buildup in Channel North of Structure. See Photo. Inspection incomplete due to High Water. See Photo. 10/22/2019. Inspection completed on 11/21/2019. - 11/21/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-139-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	WALLE TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DITCH DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST MERRIFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 50' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 04' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	644618.3 5300948.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N00 Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2006 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	170 30 Year of ADT 2013	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	38 Ft.	90 Date of Last Inspection	August 01, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	37.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	35.10 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10'X 6'X 97' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-139-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	284	100	284	0	0	0	0	0	0
Notes:_										
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: New structure in 2006 most barrel sections open 1" to 1 1/2". Some riprap displaced west end.
8/2017 - Heavy vegetation in channel both ends.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-139-29.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	WALLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01837 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	10 SOUTH OF GRAND FORKS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	7.798	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 47' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 04' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	644785.8 5294295.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1970 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	570 30 Year of ADT 2013	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	6.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	48 Ft.	90 Date of Last Inspection	August 29, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	47.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	F-608(7)/F-6-081()138
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10'X10'X84' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-139-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	167	86	143	14	24	0	0	0	0
1090/3:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
Notes: _										
1120/3:Efflorescence/Rust Staining	ft	12	0	0	100	12	0	0	0	0
1130/3:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0

Remarks: NBI Remarks: Minor cracking at wing corners. Minor vertical cracks in walls. Construction joints open between 1/2" to 3/4" south side with no roadway leakage evident. Exposed rebar north barrel west end at roof. Both joints open 1/2".

Alert Code 1: 8/2017 - Scour hole just off east end of culvert 15' x 20' x 1.5' deep.

Alert Code 2: Scour hole just off west end of culvert 7' x 25' x 4' deep.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-139-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	70.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	AMERICUS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 2 SOUTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 44' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 04' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	644674.4 5289730.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 15 27 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 8 16 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	24 Gravel/Dirt	209 Posted in "Tons"	27 Tons
Age and Service		Appraisal	
27 Yr Built	1989 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	50 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 30, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.2 Ft.	Other Special	N
48 Length of Max Span	33 Ft.	218 Channel Profile	1 48 04/30/2019
49 Structure Length	36.09 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	27.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-139-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,023	100	1,023	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	436	92	400	0	0	8	36	0	0
Notes:Minor Corrosion with Pitting to underside of Girders. - 10/30/2019										
1000/2:Corrosion	ft	36	0	0	0	0	100	36	0	0
Notes:Minor rusting with pitting to underside Girders near West Abutment. - 10/30/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Areas of Rusting because loss of effectiveness. - 10/30/2019										
111/2:Timber Open Girder	ft	180	100	180	0	0	0	0	0	0
206/2:Timber Column	each	14	100	14	0	0	0	0	0	0
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	59	100	59	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	72	96	69	0	0	0	0	4	3
1140/1:Decay/Section Loss	ft	3	0	0	0	0	0	0	100	3
Notes:Section loss near SE Corner. See Photo. - 10/30/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
7000/2:Damage	each	1	0	0	100	1	0	0	0	0
Notes:Minor Fire Damage to SW Wing. - 10/30/2019										

Remarks: [NBI Remarks: Minor fire damage to SW wing and piling. Pitting on bottom of girder #4 from the north with minor section loss. No railing. Volunteer Tree Growth near NW Wing and Under Structure near SW Corner. - 10/30/2019

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SEC 409

Structure Number: 18-139-31.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	AMERICUS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01837 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 2 SOUTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.099	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 44' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 04' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	644898.2 5289952.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1936 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	570 30 Year of ADT 2013	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	October 11, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	F-6-081(00)130
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10'X10'X43' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-139-31.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	85	82	70	18	15	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	15	0	0	100	15	0	0	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	6	100	6	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
Notes: _										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: NBI Remarks: Crack and spall very end, upper & lower portion, northwest wing. Crack and spall open to 1" near the floor southwest wing. Poor channel alignment from the west. West channel cleanout in 2011. 10/2015 - Some minor cracking with effloresence in all walls. Slope protection east end of culvert. Some cracking and spalling to the tops of both west wings.

Alert Code 1: 10/2015 - Sour hole off west end of culveret 10 x 15 x 1.5' deep.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-140-25.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	WALLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01837 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH OF GRAND FORKS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	12.198	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 50' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 02' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	646258.0 5300984.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2006 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	1,220 30 Year of ADT 2013	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	6.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	44 Ft.	90 Date of Last Inspection	August 11, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	44.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	34.12 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	F-6-081(13)900
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10'X 7'X 103' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-140-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	309	100	309	0	0	0	0	0	0
Notes: _										
1130/1:Cracking (RC and Other)	ft	11	100	11	0	0	0	0	0	0
Notes: _										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: New structure in 2006.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-140-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	WALLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 NORTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 47' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 03' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	645015.9 5294582.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1999 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2013	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	August 04, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	49.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	32.15 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X10.5X74' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-140-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	148	90	133	10	15	0	0	0	0
1130/3:Cracking (RC and Other)	ft	40	63	25	38	15	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [] NBI Remarks: Minor hairline cracks in all walls. Some minor leakage west outside wall. Minor erosion behind NE wing. Vegetation and tree growth in channel both sides. Minor cracks @ wing corners.

Alert Code 1: Scour hole 2' x 32' x 1.0' deep just off both ends of culvert.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-140-28.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	WALLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 2 NORTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 47' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 02' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	646366.0 5295665.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 43 77 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 47 Tons
208 Dk Overburden	24 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1989 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	August 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 07/22/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	212 Structure Load Rated	05/02/2018
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-140-28.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	210	100	210	0	0	0	0	0	0
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	62	100	62	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [NBI Remarks: Vegetation in channel west of structure. East ditch bank erosion entering channel near SE wing. Poor channel alignment. Posted 35 mph south end only. South channel bank erosion downstream. County forces added a metal protection collar encased w/concrete to the west outside beam for ice impact protection - see photo. - 8/21/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-140-31.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	79.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	AMERICUS TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 2 SOUTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 44' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 02' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	646507.2 5289777.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 19 34 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 11 21 Tons
Dk Protect	None	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	35 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed 1986	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 20, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	26.9 Ft.	Other Special	N
48 Length of Max Span	21 Ft.	218 Channel Profile	1 48 05/01/2019
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	07/25/2017
51 Bridge Rdwy Width - Curb to Curb	27.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-140-31.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	646	99	642	1	4	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	4	0	0	100	4	0	0	0	0
Notes:Section loss underside of Deck in-between Timber Girder 13 and Steel Girder 14, Similar in-between Steel Girder 14 and 15. we Photo. - 9/20/2019										
107/2:Steel Opn Girder/Beam	ft	318	0	0	0	0	100	318	0	0
1000/2:Corrosion	ft	318	0	0	0	0	100	318	0	0
Notes:Rusting to all Steel Girders. See Photo. - 9/20/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Loss of effectiveness to all Girders. See Photo. - 9/20/2019										
111/2:Timber Open Girder	ft	98	49	48	51	50	0	0	0	0
1140/2:Decay/Section Loss	ft	98	49	48	51	50	0	0	0	0
Notes:Molding to various Timber Girders creating decay. See Photo. - 9/20/2019										
206/2:Timber Column	each	14	100	14	0	0	0	0	0	0
216/2:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	49	90	44	0	0	10	5	0	0
1140/1:Decay/Section Loss	ft	5	0	0	0	0	100	5	0	0
Notes:Decay Section Loss to SW Corner or Curb, See Photo. - 9/20/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Rotting Piling within all four Winds. See Photo. - 9/20/2019										

Remarks: NBI Remarks: Rusting to all steel girders. Rotted piling in all four wings. Structure size restricts channel flow. old Piling in Channel near West Timber Abutment. - 9/20/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-140-31.3

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	43.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	AMERICUS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 2 SOUTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	646505.5 5290134.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 7 13 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 4 8 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	13 Tons
Age and Service		Appraisal	
27 Yr Built	1920 106 Yr Reconstructed	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 20, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 11/20/2019
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.4 Ft.	Other Special	N
48 Length of Max Span	49 Ft.	218 Channel Profile	1 48 05/23/2017
49 Structure Length	55.12 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	16.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	17.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-140-31.3

Structure Number: 18-140-31.3

[illegible]

Structure Number: 18-140-31.3

231/2:Steel Pier Cap	ft	30	0	0	100	30	0	0	0	0
1000/2:Corrosion	ft	30	0	0	100	30	0	0	0	0
Notes:Rusting to Both Pier Caps. See Photo. - 11/20/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Inspection incomplete due to High Water. See Photo. 10/30/2019. No Coating. Loss of effectiveness. - 11/20/2019										
235/2:Timber Pier Cap	ft	43	100	43	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	108	0	0	7	8	93	100	0	0
1000/1:Corrosion	ft	100	0	0	0	0	100	100	0	0
Notes:Rusting to both railings. - 11/20/2019										
7000/1:Damage	ft	8	0	0	100	8	0	0	0	0
Notes:Minor damage to East Railing near SE Corner. - 11/20/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
332/1:Timb Bridge Railing	ft	5	0	0	0	0	0	0	100	5
1170/1:Split/Delamination (Timber)	ft	5	0	0	0	0	0	0	100	5
Notes:Split with section loss near SE Corner. See Photo. - 11/20/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
Notes:Scour hole under structure 25 x 100 x 3.0' deep. - 11/20/2019										
8401/3:Wings	each	2	0	0	100	2	0	0	0	0
1140/3:Decay/Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Decay to Top Plank and Wing Pile at SE Wing, - 11/20/2019										
7000/3:Damage	each	1	0	0	100	1	0	0	0	0
Notes:Fire Damage, decay to Top Plank and Wing Pile at SW Wing. See Photo. - 11/20/2019										

Remarks: 1/3/2006 - County has bolted 3' section of 7" I beams to existing steel stringers between cap and floor beam, south abutment. See photos. NBI Remarks: Truss members rusty. I-beam pieces bolted through stringers at south floor beam. Poor channel alignment from west. Fire damage to southwest wing pile. Wing piling rotted in both wings. Rusting to lower portion of cans. Inspection incomplete due to High Water. See Photo. 10/30/2019. Inspection Completed 11/20/2019. - 11/20/2019

Alert Code 1: Vehicle damage to E-E section from U1-L2 and from U2-L2', right side & A-A member from U1' to L1' east side. Section loss completely through web of 1 channel stringer @ south abutment - stringer #4 from the west. D-D section bent from L0 to L1 east side. Pack rust to upper truss connection plates. 10/2015 - Scour hole under structure 25 x 100 x 3.0' deep. - 11/20/2019

Fracture Critical: Truss Section completed with no additional equipment used. Underside of Truss Elements Inspection incomplete due to High Water. See Photo. 10/30/2019. Underside Truss Inspection completed with no additional equipment. 11/20/2019. - 11/20/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-140-33.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	AMERICUS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 4 SOUTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 42' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 02' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	646591.2 5286541.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 37 68 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 41 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	2006 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	9 Above Desirable Crit
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 20, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	33.1 Ft.	Other Special	N
48 Length of Max Span	31 Ft.	218 Channel Profile	1 48 05/01/2019
49 Structure Length	34.12 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	05/02/2018
51 Bridge Rdwy Width - Curb to Curb	33.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	34.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-140-33.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	279	94	262	4	12	2	5	0	0
1080/1:Delamination/Spall/Patched Area	ft	12	0	0	58	7	42	5	0	0
Notes:Spalling to Beam ends at Both Abutments and NE Corner. See Photo. - 9/20/2019										
1110/1:Cracking (PSC)	ft	5	0	0	100	5	0	0	0	0
Notes:Cracking near both Abutments. - 9/20/2019										
215/2:Re Conc Abutment	ft	76	93	71	7	5	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
Notes:Spalling to NW Corner and along top West Abutment. See Photo. - 9/20/2019										
330/1:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Cracking to NW Wing Corner. - 9/20/2019										

Remarks: NBI Remarks: Some concrete spalling to beam ends both abutments. No curb. New structure 2006. Diagonal cracking @ NW wing corner & west abutment backwall. 11/20/2006 - Used quad tees from 18-128-02.0 plus 4 new to construct this structure. Heavy Vegetation in Channel Both sides. - 9/20/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-140-34.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	63.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	AMERICUS TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 8 Service R 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 4 SOUTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 42' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 02' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 646613.7 5285833.7		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 27 48 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 16 29 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden 1	None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built 1940 106 Yr Reconstructed 1989		67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT 5 30 Year of ADT 2019		72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	0 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 20, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.9 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 07/22/2015
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	05/02/2018
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-140-34.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	635	100	635	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	197	65	127	36	70	0	0	0	0
1000/2:Corrosion	ft	70	0	0	100	70	0	0	0	0
Notes:Minor corrosion to underside bottom flange throughout all girders. - 9/20/2019										
515/2:Steel Protective Coating	sq.ft	100	65	65	35	35	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	35	0	0	100	35	0	0	0	0
Notes:loss of effectiveness to underside of steel girders. - 9/20/2019										
111/2:Timber Open Girder	ft	220	99	217	0	0	1	3	0	0
1140/2:Decay/Section Loss	ft	3	0	0	0	0	100	3	0	0
Notes:Section loss next to center rail post on North Facia Timber Girder. See Photo. - 9/20/2019										
206/2:Timber Column	each	10	30	3	0	0	50	5	20	2
1140/2:Decay/Section Loss	each	4	0	0	0	0	100	4	0	0
Notes:Decay to Piles #1, #2, #4, and #5 West Abutment. - 9/20/2019										
1170/2:Split/Delamination (Timber)	each	3	0	0	0	0	33	1	67	2
Notes:Timber Columns #2 and #3 east Abutment split at top and E3 West Abutment. - 9/20/2019										
216/2:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	56	95	53	5	3	0	0	0	0
1180/2:Abrasion	ft	3	0	0	100	3	0	0	0	0
Notes:Abrasion to East Abutment. - 9/20/2019										
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	95	95	5	5	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	5	0	0	100	5	0	0	0	0
Notes:Peeling to areas on South railing. - 9/20/2019										
332/1:Timb Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	2	100	2	0	0	0	0	0	0

Remarks: [NBI Remarks: Poor vertical from field to approach. Some rotting of timber pile in abutments. Channel bank erosion both sides near east abutment. Structure length restricts channel flow. Some cracking-splitting north end east abutment cap. Volunteer Tree Growth under structure near SW Wing. - 9/20/2019

Alert Code 2: Timber columns #2 & #3 east abutment & timber column # 3 west abutment split @ the top - See photo. Some inward movement of the east abutment. Timber column #4 east abutment, bows in & only supports 20% - 30% of the cap resting on back portion of timber pile # 4. - 9/20/2019

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SEC 409

Structure Number: 18-141-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	WALLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH GRAND FORKS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 50' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 01' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	647877.9 5301019.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	MS 18 (HS 20) (live load for which structure was designated)
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 33 59 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden N	Not Applicable	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	2006 106 Yr Reconstructed -1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	N Not applicable (NBI)
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	225 30 Year of ADT 2013	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	N N 1 1
19 Bypass, Detour Length	2 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 01, 2017
32 Approach Roadway Width	34 Ft.	91 Designated Inspection Frequency	48 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	33.8 Ft.	Other Special	N
48 Length of Max Span	10 Ft.	218 Channel Profile	0
49 Structure Length	35.10 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	213 Federal Aid Project Number	BRO-18(10)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
TRIPLE, 10'X 8'X 103' PRECAST RCB			

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SEC 409

Structure Number: 18-141-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	309	100	309	0	0	0	0	0	0
1130/3:Cracking (RC and Other)	ft	30	100	30	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: New structure in 2006.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-141-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	WALLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 4 EAST THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 49' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 01' 40.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	647638.0 5297884.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 47 85 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 28 51 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2009 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	20 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	August 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.2 Ft.	Underwater	N
48 Length of Max Span	47 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 05/23/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	31.5 Ft.	212 Structure Load Rated	05/02/2018
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-141-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	400	98	390	3	10	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
Notes:Very minor spalling along top edges of some beams. - 8/16/2019										
215/2:Re Conc Abutment	ft	74	100	74	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	100	100	100	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
1130/2:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:Longitudinal crack top of southeast wing- see photo. - 8/16/2019										

Remarks: [] NBI Remarks: New structure in 2009. Poor channel alignment from the south. 8/2015 - Longitudinal crack top of SE wing with minor spall. Minor spalling on top edges of some beams. - 8/16/2019

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North Dakota Department of Transportation

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SEC 409

Structure Number: 18-141-26.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	WALLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELM COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 4 EAST THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 49' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 01' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	647926.3 5298531.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 28 50 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 30 Tons
208 Dk Overburden	2 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	61 Ft.	Other Special	N
49 Structure Length	64.96 Ft.	218 Channel Profile	1 48 05/02/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	05/03/2018
	29.5 Ft.	213 Federal Aid Project Number	BRO-18(15)
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-141-26.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	302	100	302	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	131	100	131	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 01/10/2008 - NBI Remarks: No curb. Minor Spalling at Steel Bridge Railing connections from impacts Near North Abutment on both East and West railing. See Photo. Sediment buildup approx. 75' down stream restricting flow. See Photo. - 9/20/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-141-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	WALLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 2 WEST THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 48' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 02' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	646883.9 5296237.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 30 55 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 18 33 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	204 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1951 106 Yr Reconstructed	2018	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	55 30 Year of ADT	2018	7 Above Minimum
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	July 03, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.0 Ft.	Underwater	N
48 Length of Max Span	32 Ft.	Other Special	N
49 Structure Length	34.70 Ft.	218 Channel Profile	1 48 07/21/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.0 Ft.	212 Structure Load Rated	09/26/2019
52 Deck Width	28.3 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer,Nefstead
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-141-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	982	100	982	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	612	74	454	0	0	26	158	0	0
1000/2:Corrosion	ft	158	0	0	0	0	100	158	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
111/1:Timber Open Girder	ft	136	100	136	0	0	0	0	0	0
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	69	100	69	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	50	2	50	2	0	0	0	0

Remarks: [] NBI Remarks: No curb. Piling in south wings rotted. Scour hole under structure 2' x 28' x 30'. Deadmen crushing piling both east wings. Heavy vegetation and tree growth in channel.10/2015 - 6/27/2018 - Exst 3" timber deck removed. 15 EA Exst 15" I-beams salvaged, cleaned & repainted. Riprap added to wings and abutments. 4 EA 15" I-beams added. 19 EA 15" I-beams installed, see attached layout. New timber nailers installed. New 4" timber deck installed and widened from 26' to 28'. Guardrail reinstalled. Exst timber caps, piles, back walls, wings left in place and reused. Installed center sway brace under beams mid span.

Alert Code 1: Some section loss up to 10% bottom flange most beams.

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SEC 409

Structure Number: 18-141-31.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	80.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	AMERICUS TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 2 SOUTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 45' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 01' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	648106.1 5290618.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 20 37 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 11 21 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1936 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	2 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	13 Ft.	90 Date of Last Inspection	September 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/01/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	05/03/2018
	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-141-31.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	603	92	553	8	50	0	0	0	0
1180/1:Abrasion	sq.ft	50	0	0	100	50	0	0	0	0
Notes:Wear to the ends of deck planks. See photo. - 9/20/2019										
107/2:Steel Opn Girder/Beam	ft	151	0	0	0	0	100	151	0	0
1000/2:Corrosion	ft	151	0	0	0	0	100	151	0	0
Notes:Rusting to all Steel Girders with pitting underside of Bottom Flange. See Photo. - 9/20/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Loss of coating creating rusting and pitting. See Photo. - 9/20/2019										
111/2:Timber Open Girder	ft	325	91	297	1	3	8	25	0	0
1160/2:Crack (Timber)	ft	28	0	0	11	3	89	25	0	0
Notes:Timber Girder #6 from North Crack to lower portion. See Photo. Crack to Timber Girder #8 from North with 3" x 12" timber support brace. See Photo. - 9/20/2019										
206/3:Timber Column	each	10	20	2	80	8	0	0	0	0
1140/3:Decay/Section Loss	each	8	0	0	100	8	0	0	0	0
Notes:Decay to Piles 5, 4, 3, 2, 1 on East Abutment and Piles 1,2, and 4 on West Abutment. See Photo. - 9/20/2019										
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb or railing. Rusty girders. Both caps tilting back slightly. Top backwall plank east abutment tilted back. Rotting pile in abutment & wings. Timber girder #8 from the north braced with 3" x 12" timber. Timber Girder #6 from North 3' Crack along underside. 9/27/2017 - Rotting to ends of some deck planks. Some pitting to the bottom of flange on most steel girders. Wear to some deck planks. - 9/20/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-141-31.3

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	AMERICUS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 2 SOUTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 45' 29.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 01' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	648090.1 5291299.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 27 49 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 30 Tons
208 Dk Overburden	24 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1950 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	September 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.9 Ft.	Underwater	N
48 Length of Max Span	33 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	1 48 05/01/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	27.2 Ft.	212 Structure Load Rated	03/01/2018
52 Deck Width	28.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-141-31.3

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	322	85	272	16	50	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
Notes:Spalling to underside of Channel Beams at North Abutment. See Photo. - 9/20/2019										
1090/1:Exposed Rebar	ft	40	0	0	100	40	0	0	0	0
Notes:Spalling with exposed rebar to Channel Beams underside at North Abutment. - 9/20/2019										
206/3:Timber Column	each	14	93	13	7	1	0	0	0	0
1140/3:Decay/Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Decay section loss to Pile #3 North Abutment. - 9/20/2019										
216/3:Timber Abutment	ft	59	88	52	12	7	0	0	0	0
1140/3:Decay/Section Loss	ft	7	0	0	100	7	0	0	0	0
Notes:Decay/Section Loss to Cap along Spalling of Channel beams along North Abutment. - 9/20/2019										
235/2:Timber Pier Cap	ft	59	86	51	14	8	0	0	0	0
1140/2:Decay/Section Loss	ft	8	0	0	100	8	0	0	0	0
Notes:Section loss to top of Cap along North Abutment. - 9/20/2019										
330/1:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
7000/2:Damage	each	1	0	0	100	1	0	0	0	0
Notes:Damage to NW Wing due to Fire. See Photo. - 9/20/2019										

Remarks: NBI Remarks: Minor fire damage-upper portion northwest wing, west end north abutment (cap and 3 piling), bottom of outside beam. Ice damage to southwest wing-top plank. Top plank northeast wing broken. - 9/20/2019

Alert Code 1: Honeycombing on bottom of precast channel beams with exposed reinforcing steel. - 9/20/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-141-31.4

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	69.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	AMERICUS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 2 SOUTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 45' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 02' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	646989.6 5290728.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 14 26 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 8 16 Tons
208 Dk Overburden	23 Gravel/Dirt	70 Bridge Posting	2 20.0-29.9%below
Age and Service		209 Posted in "Tons"	26 Tons
27 Yr Built	1951 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	November 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.9 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	1 48 05/02/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	212 Structure Load Rated	07/26/2017
52 Deck Width	26.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-141-31.4

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	753	93	703	7	50	0	0	0	0
1180/1:Abrasion	sq.ft	50	0	0	100	50	0	0	0	0
Notes:Chuck Holes and Wear to various planks. No Photo taken due to Overburden. - 11/20/2019										
107/2:Steel Opn Girder/Beam	ft	269	0	0	100	269	0	0	0	0
1000/2:Corrosion	ft	269	0	0	100	269	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/30/2019. Rusting of all Girders. See Photo. - 11/20/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Limited coated with limited effectiveness. - 11/20/2019										
111/2:Timber Open Girder	ft	89	100	89	0	0	0	0	0	0
206/3:Timber Column	each	14	93	13	7	1	0	0	0	0
1140/3:Decay/Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Pile 7 South Abutment Decay. See Photo. - 11/20/2019										
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	92	54	9	5	0	0	0	0
1150/2:Check/Shake	ft	5	0	0	100	5	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/30/2019. Check shakes near West End of South Abutment. - 11/20/2019										
332/1:Timb Bridge Railing	ft	59	75	44	9	5	17	10	0	0
1140/1:Decay/Section Loss	ft	5	0	0	100	5	0	0	0	0
Notes:Section loss near SE Corner. See Photo. - 11/20/2019										
1170/1:Split/Delamination (Timber)	ft	10	0	0	0	0	100	10	0	0
Notes:Split to curb near NE Corner. See Photo. Various other areas along East Curb. - 11/20/2019										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/30/2019. - 11/20/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railing. Rusty girders. Rotted deck plank with chuck holes. Minor rotting-tops of all wing piles. 10/2017 - Some settling of both slope protections. Structure Posted at 26 Tons both sides. Inspection incomplete due to High Water. See Photo. 10/30/2019. Inspection Completed 11/20/2019. - 11/20/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-142-24.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	GRAND FORKS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01824 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 5 NORTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	30.693	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 50' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 00' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	649034.5 5301085.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 54 98 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	575 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.8 Ft.	Underwater	N
48 Length of Max Span	73 Ft.	Other Special	N
49 Structure Length	75.13 Ft.	218 Channel Profile	1 48 07/21/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	05/03/2018
	32.2 Ft.	213 Federal Aid Project Number	CBRS-1824(51)
52 Deck Width	34.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-142-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	2,583	100	2,583	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	354	100	354	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	69	91	63	9	6	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	6	0	0	100	6	0	0	0	0
Notes:Cracking with minor seepage and efflorescence at East Abutment. - 10/30/2019										
330/1:Metal Bridge Railing	ft	151	100	151	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [] NBI Remarks: East channel bank erosion south of structure. Poor channel alignment to the north. Vehicle damage to the northeast guardrail and end terminal. Minor Vehicle Damage to SE Guardrail. Minor horizontal cracks east abutment. 10/2015 -In 2015 NW channel bank reshaped and riprap placed along channel bank see photos. - 10/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-142-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	WALLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 4 NORTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 49' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 00' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	648451.1 5299519.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	August 17, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	4.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	29.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/16/2018
	0.0 Ft.	213 Federal Aid Project Number	BRO-6986(110)114
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
DOUBLE 14 X 14 X 72' PCRCB			

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SEC 409

Structure Number: 18-142-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	144	100	144	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 8/2018 - Bridge replaced with a double RCB. 08/17/2018 - Grouted riprap dam south of structure.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-142-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	WALLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 3 NORTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 49' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 01' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	648194.6 5297897.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 13.5 (HS 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 28 50 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 30 Tons
208 Dk Overburden	25 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	September 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.5 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 05/02/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/23/2017
	30.8 Ft.	213 Federal Aid Project Number	
52 Deck Width	34.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-142-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	308	95	293	5	15	0	0	0	0
1130/1:Cracking (RC and Other)	ft	15	0	0	100	15	0	0	0	0
Notes:Cracking to Beams during construction. Could not get photo due to scour hole under structure. - 9/20/2019										
206/2:Timber Column	each	18	100	18	0	0	0	0	0	0
216/2:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	62	100	62	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	90	90	10	10	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	10	0	0	100	10	0	0	0	0
Notes:Minor areas along railing showing loss of effectiveness to galvanized coating. - 9/20/2019										
331/1:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	0	0	50	1	0	0
6000/1:Scour	each	1	0	0	0	0	100	1	0	0
Notes:Scout Hole Under structure 20' x 30' x 1.5' Dee along East Abutment. See Alert Code 1. - 9/20/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor channel bank erosion north of structure. Beams damaged during construction exposing rebar at lifting holes each beam. Volunteer Tree Growth along SW Wing Corner. See Photo. SW Wing Top Plank separating from timber piling. - 9/20/2019

Alert Code 1: Scour hole center of channel under structure and along East Abutment - 20' x 30' x 1.5' deep. - 9/20/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-142-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	69.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	WALLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 4 EAST THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 48' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 01' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	648232.4 5296281.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 17 32 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 11 21 Tons
208 Dk Overburden	27 Gravel/Dirt	70 Bridge Posting	3 10.0-19.9%below
Age and Service		209 Posted in "Tons"	32 Tons
27 Yr Built	1968 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.9 Ft.	Underwater	N
48 Length of Max Span	25 Ft.	Other Special	N
49 Structure Length	27.89 Ft.	218 Channel Profile	1 48 05/01/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-142-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	807	100	807	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	325	0	0	100	325	0	0	0	0
1000/2:Corrosion	ft	325	0	0	100	325	0	0	0	0
Notes:Rusting to all Girders. See Photo. Inspection incomplete due to High Water. See Photo. 10/30/2019. - 11/20/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	50	50	50	50	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	50	50	50	50	0	0
Notes:Areas with minimal coating. Losing effectiveness. - 11/20/2019										
111/2:Timber Open Girder	ft	108	100	108	0	0	0	0	0	0
206/3:Timber Column	each	4	100	4	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	49	0	0	98	48	2	1	0	0
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	0	0	100	1	0	0
Notes:Spall at SW Corner of West Abutment. See Photo. - 11/20/2019										
1190/3:Abrasion(PSC/RC)	ft	23	0	0	100	23	0	0	0	0
Notes:Inspection incomplete due to High Water. See Photo. 10/30/2019. Wear to both abutments near water line exposed aggregate. Coded to West Abutment. See Photo. - 11/20/2019										
4000/3:Settlement	ft	25	0	0	100	25	0	0	0	0
Notes:Inward movement on top and outward movement at bottom causing lean. Refer to Alert Code 1 for Lean Measurements. See Photo. Lean causing spalling at corners. - 11/20/2019										
216/3:Timber Abutment	ft	20	100	20	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	52	100	52	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	52	100	52	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 1/6/2006 - East abutment lean increased by 3/4". 01/10/2008 - Lean measurements checked on abutments unchanged. NBI Remarks: Rusty girders. Scaling at water line in concrete abutments. Approximately 1 1/2" of section loss to the lower portion of the east abutment. No change in lean in 2010, 2011,2013,2015 or 2017. 10/2017 - Large amount of riprap in channel blocking flow. Erosion near NE Corner and North of Structure along top of back. Lean causing moderate to severe spalling at corners of East Abutment. See Photo. Tree Growth around SW, NE, NW wings. Inspection incomplete due to High Water. See Photo. 10/30/2019. Inspection completed 11/20/2019. - 11/20/2019

Alert Code 1: East abutment leans in 3" in 4', no change from last inspection. Northeast ditch erosion near the NE wing. East channel bank erosion downstream & upstream. No Change in Lean in 2019. - 11/20/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-142-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	41.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	WALLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 4 EAST THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 47' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 01' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	648343.1 5294664.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 11 21 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 6 11 Tons
208 Dk Overburden	24 Gravel/Dirt	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	18 Tons
27 Yr Built	1969 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	2 Intolerable - Replace
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.9 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	33.14 Ft.	218 Channel Profile	1 48 07/22/2015
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-142-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	958	100	958	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	397	0	0	50	197	50	200	0	0
1000/2:Corrosion	ft	397	0	0	50	197	50	200	0	0
Notes:Rusting to all Girders. See Photo. - 10/30/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:No Coating. Loss of Effectiveness. - 10/30/2019										
111/2:Timber Open Girder	ft	131	100	131	0	0	0	0	0	0
206/3:Timber Column	each	8	100	8	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	49	4	2	84	41	8	4	4	2
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
Notes:Spalling near NW Corner. - 10/30/2019										
1130/3:Cracking (RC and Other)	ft	5	0	0	20	1	40	2	40	2
Notes:Severe large cracking near NW Corner. - 10/30/2019										
4000/3:Settlement	ft	40	0	0	100	40	0	0	0	0
Notes:Lean to Both Abutments. See Alert Code 2. - 10/30/2019										
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	0	0	100	66	0	0	0	0
1900/2:Distortion	ft	66	0	0	100	66	0	0	0	0
Notes:East Abutment Cap Sagging. See Photo. - 10/30/2019										
330/1:Metal Bridge Railing	ft	66	100	66	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	66	100	66	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: NBI Remarks: Rusty girders. Large vertical cracks at north side of both abutments with spalling to the north end of west abutment and crack open to 1". Embankment erosion near all 4 abutment corners. See Photo. Some pitting & minor section loss bottom flange most beams. No change in lean from 2010 - 2013. Severe erosion behind NE Wing. See Photo. Volunteer Tree Growth near SE Wing. - 10/30/2019

Alert Code 2: East abutment leans in 3 1/2" in 4' north side and west abutment leans in 1 1/2" in 4' measured at center. No change in lean measurements in 2015. 10/11/2017 - No change in east abutment lean. West abutment leans in 2" in 4" measured at center. A change from 1.5". No Change in Lean Measurements in 2019 to both Abutments. - 10/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-142-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	WALLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 46' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 01' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	648415.2 5293053.8	Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 30
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 18
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1950	67 Structural Condition	6 Equal Min Criteria
106 Yr Reconstructed	-1	68 Deck Geometry	6 Equal Min Criteria
42 Type of Service	1 Highway - On	69 Underclear. Vert & Horiz	N Not applicable (NBI)
	5 Waterway - Under	71 Waterway Adequacy	8 Equal Desirable
28 Lanes on Structure	2	72 App. Rdwy. Alignment	8 Equal Desirable Crit
29 ADT	65	36 Traffic Safety Features	0 0 0 0
30 Year of ADT	2019	113 Scour Critical	U Unknown Scour
109 Average Daily Truck Traffic	-1.00		
19 Bypass, Detour Length	2 Miles		
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 21, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	26.9 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	1 48
49 Structure Length	36.09 Ft.	Chaining Date	05/23/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	None
	0.7 Ft Lt-Side	212 Structure Load Rated	-1
51 Bridge Rdwy Width - Curb to Curb		213 Federal Aid Project Number	05/03/2018
	26.9 Ft.	214 Delayed Inspection	Not Applicable
52 Deck Width	28.9 Ft.	216 Inspector	Fischer
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	Navigation Data	
54 Min Vert Underclearance	0 Ft. 0 In.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
55 Min Lateral UnderClear. - Rt	99.9 Ft.	40 Navigation Horizontal Clearance	0 Ft.
	N Feature not hwy or RR	111 Pier or Abutment Protection	Unknown (NBI)
56 Min Lateral UnderClear. - Lt	0.0 Ft.	116 Minimum Navigation Vertical Clearance	Ft.
210 Culvert / 211 Description			

Structure Number: 18-142-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	325	92	300	8	25	0	0	0	0
1110/1:Cracking (PSC)	ft	25	0	0	100	25	0	0	0	0
Notes:Minor vertical cracks in outside beams various areas near center of beams. - 8/21/2019										
206/3:Timber Column	each	14	79	11	21	3	0	0	0	0
1170/3:Split/Delamination (Timber)	each	3	0	0	100	3	0	0	0	0
Notes:Piles #2 & #6 east abutment split and open to 1/2" under the cap to approximately 1' down- see photos. Pile #4 from the south split and open to 3/8" west abutment. - 8/21/2019										
216/3:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	89	59	8	5	3	2	0	0
1140/2:Decay/Section Loss	ft	5	0	0	100	5	0	0	0	0
Notes:South end of the west pier cap crushing w/small portion of the cap missing- see photo. - 8/21/2019										
7000/2:Damage	ft	2	0	0	0	0	100	2	0	0
Notes:Ice damage to the north end of the east abutment cap - see photo. - 8/21/2019										
330/1:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:West abutment slope protection settled/displaced. - 8/21/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Top wing plank missing at the southeast wing. - 8/21/2019										

Remarks: NBI Remarks: Pile #2 & #6 east abutment from south are split and pile #4 from south in west abutment split at top also. Minor vertical cracks in channel beam. Embankment erosion behind NE & SW wings. East abutment bows inward with some cracking lower portion pile #5. 1 rotted NW wing pile. 8/2015 - Ice damage to the north end of cap east abutment. 8/2017 - Pile #2 east abutment moving inward with cap sitting on 50% of the pile. West abutment slope protection settled and displaced. No bridge end markers. - 8/21/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-142-30.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	WALLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01830 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 1 SOUTH THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.300	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 45' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 01' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	648530.3 5291440.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2002 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	1,000 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	36.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	41.01 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRC-1830(051)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10X8X120' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-142-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	360	99	357	0	0	1	3	0	0
1090/3:Exposed Rebar	ft	3	0	0	0	0	100	3	0	0
Notes:Spalling with exposed rebar to center and west barrels. See Photo. I - 9/20/2019										
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Spalling with exposed reinforcing steel to precast roof section on the north end in west and center barrel sections. Spalling to concrete headwalls south end. East channel bank erosion south side. 10/2015 - All culvert sections settling approximately 6" under roadway. - 9/20/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-143-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	40.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	WALLE TOWNSHIP	37 Historical Significance	1 Br on Natl Reg Hist PI
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 6 EAST THOMPSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 47' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 58' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	651073.1 5294741.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 15 27 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 10 19 Tons
208 Dk Overburden	24 Gravel/Dirt	70 Bridge Posting	1 30.0-39.9%below
Age and Service		209 Posted in "Tons"	27 Tons
27 Yr Built	1910 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	2 Intolerable - Replace
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	Y 24 10/30/2019
47 Total Horizontal Clearance	17.1 Ft.	Underwater	N
48 Length of Max Span	61 Ft.	Other Special	N
49 Structure Length	67.91 Ft.	218 Channel Profile	1 48 07/22/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/31/2015
	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	13 Ft. 6 In.	216 Inspector	Nefstead, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-143-28.0

Structure Number: 18-143-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,152	100	1,152	0	0	0	0	0	0
113/2:Steel Stringer	ft	679	0	0	0	0	100	679	0	0
1000/2:Corrosion	ft	679	0	0	0	0	100	679	0	0
Notes:Rusting to all Stringers. See Photo. - 10/30/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of Effectiveness. - 10/30/2019										
120/2:Steel Truss	ft	135	0	0	0	0	100	135	0	0
1000/2:Corrosion	ft	129	0	0	0	0	100	129	0	0
Notes:Rusting to all Members. See Photo. - 10/30/2019										
1900/2:Distortion	ft	6	0	0	0	0	100	6	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Loss of Coating. No Effectiveness. - 10/30/2019										
152/2:Steel Floor Beam	ft	79	0	0	0	0	100	79	0	0
1000/2:Corrosion	ft	79	0	0	0	0	100	79	0	0
Notes:Rusting to all Floor Beams. See Photo. - 10/30/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Loss of Coating. No Effectiveness. - 10/30/2019										
202/2:Steel Column	each	4	0	0	0	0	100	4	0	0
1000/2:Corrosion	each	4	0	0	0	0	100	4	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of Effectiveness. - 10/30/2019										
206/2:Timber Column	each	6	100	6	0	0	0	0	0	0
216/2:Timber Abutment	ft	39	100	39	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	30	0	0	0	0	100	30	0	0
1000/2:Corrosion	ft	30	0	0	0	0	100	30	0	0
Notes:Rusting to both Caps. - 10/30/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of effectiveness. - 10/30/2019										
330/1:Metal Bridge Railing	ft	135	96	129	4	6	0	0	0	0
7000/1:Damage	ft	6	0	0	100	6	0	0	0	0
Notes:Damage to North Rail near NW Corner. - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	135	100	135	0	0	0	0	0	0

Structure Number: 18-143-28.0

7357/1:Pack Rust	each	1	0	0	100	1	0	0	0	0
Notes:Pack rust beginning to form on upper truss connection. - 10/30/2019										
7362/1:Superstructure Traffic Impact	each	1	0	0	100	1	0	0	0	0
Notes:Vehicle damage to upper cross strut brace center section. A-A sections U2 to L2 bent from vehicle damage south side, Also U2' to L2' has holes in it north side. See photo. Pack rust beginning to form on the upper and lower connection plates. Vehicle damage to B-B member from U1 to L0 right side. - 10/30/2019										
8401/2:Wings	each	4	50	2	50	2	0	0	0	0
4000/2:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Piling pulling away from Wings at East Abutment. - 10/30/2019										

Remarks: ☐ NBI Remarks: Trees growing in channel both sides of structure. Severly rusted upper cross bracing and upper truss. Piling leaning away from backwall east wings. Poor vertical roadway alignment from west. Numerous deck planks replaced. Rusty stringers. Rotting of piling - all wings. Diagonal brace from upper corner NE steel column, forged I-bolt beginning to crack. Height restriction signs of 12'-6" on each end. Pack rust beginning to form on upper truss connection. 10/2015 - Channel bank erosion under structure. New Posted Signs of 27 Tons each Side. Inspection completed with no additional equipment used besides Telescoping Ladder. - 10/30/2019

Alert Code 2: Vehicle damage to upper cross strut brace center section. A-A sections U2 to L2 bent from vehicle damage south side, Also U2' to L2' has holes in it north side. See photo. Pack rust beginning to form on the upper and lower connection plates. Vehicle damage to B-B member from U1 to L0 right side. - 10/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-146-36.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Major Collector
04 City	BENTRU TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01838 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BUFFALO COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	9 EAST OF REYNOLDS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	29.794	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 40' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 55' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	656126.3 5281951.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	2 Concrete Precast Panel	64 Oper. Rating	HS 48 86 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 25 45 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1980 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	140 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	7 Countermeasures
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 20, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	65 Ft.	218 Channel Profile	1 48 07/22/2015
49 Structure Length	67.91 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	05/03/2018
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	CER-1838(51)
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-146-36.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,905	100	1,905	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	259	100	259	0	0	0	0	0	0
1110/2:Cracking (PSC)	ft	5	100	5	0	0	0	0	0	0
Notes:Superficial stress cracks near NE corner of East Abutment. See Photo. - 9/20/2019										
215/2:Re Conc Abutment	ft	59	88	52	12	7	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Spall to NE Corner of East Abutment. See Photo. - 9/20/2019										
1130/2:Cracking (RC and Other)	ft	6	0	0	100	6	0	0	0	0
Notes:Vertical Cracks to East Abutment. See Photo. - 9/20/2019										
330/1:Metal Bridge Railing	ft	135	99	134	1	1	0	0	0	0
1000/1:Corrosion	ft	1	0	0	100	1	0	0	0	0
Notes:Minor rusting to NW Corner of metal bridge railing. - 9/20/2019										
515/1:Steel Protective Coating	sq.ft	100	40	40	0	0	60	60	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	60	0	0	0	0	100	60	0	0
Notes:Peeling of Galvanized coating to railing both sides. - 9/20/2019										
331/1:Re Conc Bridge Railing	ft	135	99	133	0	0	2	2	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
Notes:Spalling to South Curb approx. mid length. See Photo. - 9/20/2019										
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Slope protection settling near NE Corner of East Abutment exposed underside of Abutment. See Photo. - 9/20/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Spalling between outside beam and end post all 4 corners. Southeast end post replaced. Cracks with spalling top of north wings. Channel bank erosion upstream & downstream. 9/2017 - Vehicle damage to NE corner end terminal. Superficial cracking to Beam 1 near East Abutment. - 9/20/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 18-147-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Gr. Forks	26 Functional	Rural, Local
04 City	BENTRU TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BUFFALO COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 9 EAST REYNOLDS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 55' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	656328.2 5283545.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 43 Tons
208 Dk Overburden	23 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2001 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	September 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.5 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	50.85 Ft.	218 Channel Profile	1 48 05/23/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.5 Ft.	212 Structure Load Rated	05/03/2018
52 Deck Width	30.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 18-147-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	400	98	392	2	8	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	8	0	0	100	8	0	0	0	0
Notes:Spalling to North Beam of the Triple Beam section. See Photo. - 9/20/2019										
215/2:Re Conc Abutment	ft	69	75	52	20	14	4	3	0	0
1080/2:Delamination/Spall/Patched Area	ft	3	0	0	0	0	100	3	0	0
Notes:Spalling to NE Corner of East Abutment. See Photo. - 9/20/2019										
1130/2:Cracking (RC and Other)	ft	14	0	0	100	14	0	0	0	0
Notes:Diagonal Crack along East Abutment. See Photo. - 9/20/2019										
330/1:Metal Bridge Railing	ft	108	100	108	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	85	85	15	15	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	15	0	0	100	15	0	0	0	0
Notes:Portions of Both railing beginning to peel. - 9/20/2019										
8398/2:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/2:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Both Slope Protection settling away from Abutments. See Photo. - 9/20/2019										
8401/2:Wings	each	2	100	2	0	0	0	0	0	0

Remarks: NBI Remarks: Poor vertical and horizontal roadway alignment. Roadway embankment settling at abutment corners. Channel bank erosion both banks upstream and downstream. Minor vertical cracks west abutment. 9/2019 - Vertical and diagonal cracking east abutment. Spall area 2' x 2' upper NE corner east abutment. Minor spall areas to the bottom of the north outside leg north triple t - beam. Volunteer Tree Growth along SE, NE, and SW Wings. - 9/20/2019

Alert Code 1: Channel bank eroding under structure with riprap being displaced. - 9/20/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF03

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Grand Forks District	22 Owner	City/Municipal Hwy Agenc
03 County	Gr. Forks	26 Functional	Urban, Minor Arterial
04 City	GRAND FORKS CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08620 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect NGLISH COULEE-LEGAL DR9		102 Direction of Traffic	2 2-way traffic
09 Location 42ND ST-17TH AVE SO.-GF		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint 0.999		104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute -1 -1		105 Federal Lands Highways	Not applicable
16 Latitude 47d 54' 15.00"		110 Designated National Network	0 Not part of natl netwo
17 Longitude 97d 05' 17.00"		112 NBIS Bridge Length	Yes
GPS Coordinates XY 642870.4 5307369.7		Condition	
98 Border Bridge Unknown (P) 0.00 %		58 Deck	N N/A (NBI)
99 Border Bridge Struct No. -		59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type Concrete		61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type Unknown (NBI)		Load Rating and Posting	
Unknown (P)		31 Design Load	
45 No. Spans in Main Unit 2		22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans 0		41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type N N/A (NBI)		63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface N N/A (no deck (NBI))		64 Oper. Rating HS 41	74 Tons
Membrane N N/A (no deck (NBI))		65 Inventory Rating Method	1 LF Load Factor
Dk Protect N N/A (no deck (NBI))		66 Inv. Rating HS 24	45 Tons
208 Dk Overburden N Not Applicable		70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1995 106 Yr Reconstructed 2014		Appraisal	
42 Type of Service 1 Highway - On		67 Structural Condition	8 Equal Desirable Crit
5 Waterway - Under		68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure 2		69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 4,750 30 Year of ADT 2013		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic 4.00		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length 2 Miles		36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance 99 Ft. 12 In.		Inspections	
32 Approach Roadway Width 24 Ft.		90 Date of Last Inspection	May 11, 2017
33 Bridge Median 0 No median		91 Designated Inspection Frequency	48 Months
34 Skew 0.00		92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared 0 No flare		Fracture Critical N	
47 Total Horizontal Clearance 24.0 Ft.		Underwater N	
48 Length of Max Span 12 Ft.		Other Special N	
49 Structure Length 25.92 Ft.		218 Channel Profile 0	
50 Curb/Sidewalk Widths 0.0 Ft Rt-Side		Chaining Date	None
0.0 Ft Lt-Side		207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb 0.0 Ft.		212 Structure Load Rated	01/01/1901
52 Deck Width 0.0 Ft.		213 Federal Aid Project Number	BRU-6-986(033)036
53 Min Vert Clear. Over Bridge 99 Ft. 12 In.		214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance 0 Ft. 0 In.		216 Inspector	Fischer, Smith
N Feature not hwy or RR		Navigation Data	
55 Min Lateral UnderClear. - Rt 99.9 Ft.		38 Navigation Control	Permit Not Required
N Feature not hwy or RR		39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt 0.0 Ft.		40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X6X100' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF03

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	200	100	200	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 06/11/2011 - 60" storm sewer enters ditch near SE wing. Vegetation in channel east side. Tree growth in east channel. 5/2015 - Under contract in 2014. The west end of the culvert was widened 12' to accommodate a 10' sidewalk. West end channel banks were reshaped, reseeded and riprap reinstalled. 5/2017 - Sediment & vegetation build up east end north barrel, channel flows thru south barrel.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF04

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Grand Forks District	22 Owner	City/Municipal Hwy Agenc
03 County	Gr. Forks	26 Functional	Urban, Minor Arterial
04 City	GRAND FORKS CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 6 Business 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ENGLISH COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	EAST OF 42ND ST	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 54' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 04' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 643366.1 5307411.7		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 2000 106 Yr Reconstructed		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 4,750 30 Year of ADT 2013		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	45 Ft.	90 Date of Last Inspection	May 11, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	5.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	44.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	9.8 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	U-CMU-6-986(058)061
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Smith
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X7X92' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF04

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	184	100	184	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/1:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: Slight sag of approximately 2" near center of culvert under roadway. 5/2017 - Volunteer tree growth at both south wings.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF05

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Grand Forks District	22 Owner	City/Municipal Hwy Agenc
03 County	Gr. Forks	26 Functional	Urban, Collector
04 City	GRAND FORKS CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	08654 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ENGLISH COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	MILL ROAD-GRAND FORKS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.500	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 57' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 38' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	644348.6 5312935.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1996 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	1,350 30 Year of ADT 2013	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	August 21, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	13 Ft.	Other Special	N
49 Structure Length	26.90 Ft.	218 Channel Profile	1 01/01/1901
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRU-6-986(036)039
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X10X219' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF05

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	438	91	398	9	40	0	0	0	0
Notes: _										
1120/1:Efflorescence/Rust Staining	ft	40	0	0	100	40	0	0	0	0
Notes: _										
4000/3:Settlement	each	1	100	1	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/3:Headwalls	each	1	100	1	0	0	0	0	0	0

Remarks: 02/02/2010 - Sag in center of sections approx. 6" - 8". 6-21-11 - Some seepage,effloresence and staining thru joints in the roof. Channel bank erosion downstream & south bank upstream. 1/31/2019 - Structure widened 146' west in 2018 to accommodate the State Mill railroad. .

Alert Code 1: Up to 2' of sediment in north barrel east half,channel runs thru the south barrel.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF08

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	79.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Grand Forks District	22 Owner	City/Municipal Hwy Agenc
03 County	Gr. Forks	26 Functional	Urban, Minor Arterial
04 City	GRAND FORKS CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	08625 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ENGLISH COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	UNIVERSITY AVE-G. FORKS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.100	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 55' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 04' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	643691.6 5309451.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	N N/A (NBI)
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 31 57 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	0 Other - Under	68 Deck Geometry	4 Tolerable
28 Lanes on Structure	4	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	11,625 30 Year of ADT 2019	71 Waterway Adequacy	N Not applicable
109 Average Daily Truck Traffic	2.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	44 Ft.	90 Date of Last Inspection	May 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	50.9 Ft.	Underwater	N
48 Length of Max Span	57 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 01/01/2000
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	8.9 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	50.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	62.3 Ft.	213 Federal Aid Project Number	HES-6-986(23)022
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	NA-no waterway
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: GF08

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	3,735	99	3,686	1	45	0	4	0	0
104/2:Pre Clsd Box Girder	ft	456	100	456	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	135	91	123	7	10	2	2	0	0
321/2:Re Conc Approach Slab	sq.ft	2,036	0	0	100	2,036	0	0	0	0
330/1:Metal Bridge Railing	ft	246	97	238	0	0	0	0	3	8
331/1:Re Conc Bridge Railing	ft	246	100	246	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
1000/1:Corrosion	each	8	0	0	0	0	0	0	100	8
Notes:Corrosion to the lower connections of the metal fence north side. - 5/13/2019										
1080/2:Delamination/Spall/Patched Area	each	3	0	0	0	0	100	3	0	0
Notes:Spalling upper wing corners east abutment. - 5/13/2019										
1120/2:Efflorescence/Rust Staining	each	20	0	0	100	20	0	0	0	0
Notes:Underside of deck near both abutments. - 5/13/2019										
1130/2:Cracking (RC and Other)	each	45	44	20	56	25	0	0	0	0
Notes:Transverse deck cracking mainly on the west end -see photo. - 5/13/2019										
4000/2:Settlement	each	2,036	0	0	100	2,036	0	0	0	0
Notes:Both approach slabs settled and overlaid w/hbp. - 5/13/2019										
8401/2:Wings	each	4	50	2	0	0	50	2	0	0
1080/2:Delamination/Spall/Patched Area	each	2	0	0	0	0	100	2	0	0
Notes:Upper corners of the east abutment wings. - 5/13/2019										

Remarks: NBI Remarks: The double rcb under this structure carries pedestrian traffic only. Utility conduits run thru abutment north side. Minor undermining of sidewalk northeast corner. Diagonal cracks in all wings of box culvert. Horizontal cracks in south headwall of box culvert with efflorescence. Some settling of paving stone under structure. Lower horizontal fencing rusted at base plate locations. Some transverse deck cracking with seepage underside of deck near both abutments. 5/2017 - Approach slabs settled and overlaid with HBP. - 5/13/2019

Alert Code 1: Cracking with seepage at all abutment corners. Spalling at both upper corners of the east abutment. - 5/13/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF09

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Grand Forks District	22 Owner	City/Municipal Hwy Agenc
03 County	Gr. Forks	26 Functional	Urban, Local
04 City	GRAND FORKS CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect NGLISH COULEE DIVERSION		102 Direction of Traffic	2 2-way traffic
09 Location	NORTH GRAND FORKS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 57' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 03' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 644343.8 5313874.6		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 2003 106 Yr Reconstructed		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 220 30 Year of ADT 2013		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 11, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	15 Ft.	Other Special	N
49 Structure Length	63.98 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DACW37-02-C-0004 STR. # 2
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Smith
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD, 15X15X52' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF09

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	280	100	279	0	1	0	0	0	0
Notes: _										
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes: _										
1130/1:Cracking (RC and Other)	ft	28	100	28	0	0	0	0	0	0
Notes: _										
8398/4:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/4:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: _ NBI Remarks: Forty eight inch (48") RCP enters channel northwest corner of structure. New guardrail and end terminals added. 5/22/2015 - Minor horizontal cracking in some barrel sections. One minor spall upper northeast corner. Vehicle damage to southeast corner end treatment.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF10

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Grand Forks District	22 Owner	City/Municipal Hwy Agenc
03 County	Gr. Forks	26 Functional	Urban, Minor Arterial
04 City	GRAND FORKS CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08640 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GF SO. END DRAINWAY	102 Direction of Traffic	2 2-way traffic
09 Location	S WASHINGTON & 49TH-GF	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.300	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 52' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 02' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 646171.0 5303863.6		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1999 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 2,400 30 Year of ADT 2013		71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	4.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 11, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.98 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Smith
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X10X122' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF10

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	243	89	216	11	27	0	0	0	0
Notes: _										
1090/3:Exposed Rebar	ft	21	0	0	100	21	0	0	0	0
Notes: _										
1120/3:Efflorescence/Rust Staining	ft	6	0	0	100	6	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Storm sewer enters channel 36.5' from west end, north side. Storm sewer pipes enter channel east of culvert. Pedestrian fence both ends of culvert. Opening between precast sections up to 1". Cracking at all upper wing corners, worse @ the east end. Pedestrian crossing advance warning signs and signals installed just north of structure. Pedestrian sidewalk over culvert on west side. One 18" rcp enters the south barrel west end near the top. Some minor areas with exposed rebar near floor north outside wall.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF11

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Grand Forks District	22 Owner	City/Municipal Hwy Agenc
03 County	Gr. Forks	26 Functional	Urban, Local
04 City	GRAND FORKS CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GF SO. END DRAINWAY	102 Direction of Traffic	2 2-way traffic
09 Location	51ST AVE S & CHERRY ST-GF	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 52' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 02' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 646738.4 5303789.8		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1998 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 1,000 30 Year of ADT 2013		71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	36 Ft.	90 Date of Last Inspection	May 18, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	35.8 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Smith
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X10X81' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: GF11

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	161	92	148	8	13	0	0	0	0
Notes: _										
1090/3:Exposed Rebar	ft	6	0	0	100	6	0	0	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	130	100	130	0	0	0	0	0	0
Notes: _										
8401/3:Wings	each	4	25	1	75	3	0	0	0	0

Remarks: NBI Remarks: Storm sewer enters channel southeast of culvert. Pedestrian fence both ends of culvert. Cracking to all upper wing corners, both south corners spalled with exposed rebar at the southwest corner. Opening between precast sections up to 1' with minor silt filtration. Cracking near the upper southeast corner and northwest corner extends into the first barrel section about 3'. Vertical cracks in both headwalls with some seepage. Longitudinal crack in both barrels.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF12

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Grand Forks District	22 Owner	City/Municipal Hwy Agenc
03 County	Gr. Forks	26 Functional	Urban, Local
04 City	GRAND FORKS CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GF SO. END DRAINWAY	102 Direction of Traffic	2 2-way traffic
09 Location	52ND AVE S & BELMONT-GF	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 52' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 01' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 647285.7 5303785.4		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1998 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 1,000 30 Year of ADT	2013	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 10, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	PROJECT NO. 4440
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Smith
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X10X730' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF12

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	1,460	97	1,423	3	37	0	0	0	0
Notes: _										
1080/1:Delamination/Spall/Patched Area	ft	37	0	0	100	37	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Storm sewers enter culvert north barrel 420' from west, south barrel 230' and 420' from west. Storm sewer enters channel southeast of box. Pedestrian fence both ends of culvert. Minor embankment erosion near ends of the east wings. Minor cracking in the west headwall with seepage. Cracking and seepage in the northeast wing where the pipe enters the wing. 5/2015 - Map cracking with some discoloration all wings. Some spalling in the roof area both barrels where barrel sections abut.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF13

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	21 Other State Agencies
02 Highway District	Grand Forks District	22 Owner	21 Other State Agencies
03 County	Gr. Forks	26 Functional	Urban, Local
04 City	GRAND FORKS CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
8 Other (incl to 0 None of th	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ENGLISH COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	UND CAMPUS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 55' 06.00"	110 Designated National Network	1 Part of natl network
17 Longitude	97d 04' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	643745.6 5309081.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	—	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	HL93 (AASHTO LRFD HL 93 design live load)	
46 No. Approach Spans	2	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 34 62 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 17 32 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2013 106 Yr Reconstructed	Appraisal	
42 Type of Service	5 Highway-pedestrian - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	4 Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	2,400 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	May 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	32.0 Ft.	Underwater	N
48 Length of Max Span	90 Ft.	Other Special	N
49 Structure Length	90.00 Ft.	218 Channel Profile	1 48 04/26/2017
50 Curb/Sidewalk Widths	1.4 Ft Rt-Side	Chaining Date	None
	10.9 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	04/15/2014
	32.0 Ft.	213 Federal Aid Project Number	BRO-6-986(110)114
52 Deck Width	45.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF13

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,118	100	4,118	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	630	100	630	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
321/1:Re Conc Approach Slab	sq.ft	1,320	100	1,320	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	260	100	260	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	40	100	40	0	0	0	0	0	0
Notes:Minor vertical cracks in barrier, mainly north side. - 5/13/2019										
520/1:Conc Re Prot Sys	sq.ft	4,118	100	4,118	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: 5/22/2015 - New structure in 2013. Structure widened with additional I-beam to accomodate steamline. Minor vertical cracks in barrier -see photo. - 5/13/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF14

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Grand Forks District	22 Owner	City/Municipal Hwy Agenc
03 County	Gr. Forks	26 Functional	Urban, Minor Arterial
04 City	GRAND FORKS CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ENGLISH COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	6TH AVE.N GRAND FORKS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 55' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 04' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	643604.4 5309841.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed	1994	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	6 Equal Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	N Not applicable (NBI)
29 ADT	11,625 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	2.00	71 Waterway Adequacy	8 Equal Desirable
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	8 Equal Desirable Crit
Geometric Data		36 Traffic Safety Features	N N 1 1
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	8 Stable Above Footing
32 Approach Roadway Width	40 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	August 18, 2017
34 Skew	0.00	91 Designated Inspection Frequency	48 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	39.7 Ft.	Fracture Critical	N
48 Length of Max Span	9 Ft.	Underwater	N
49 Structure Length	28.87 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	218 Channel Profile	1 01/01/1901
	0.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	207 Transporter Erector Routes and Sites	-1
52 Deck Width	0.0 Ft.	212 Structure Load Rated	01/01/1901
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Fischer Nefstead
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
TRIPLE, 9'X 10'X 69' RCB		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: GF14

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/4:Re Conc Culvert	ft	207	75	155	21	44	2	4	2	4
1080/4:Delamination/Spall/Patched Area	ft	4	0	0	0	0	100	4	0	0
Notes: _										
1090/4:Exposed Rebar	ft	4	0	0	50	2	0	0	50	2
Notes: _										
1130/4:Cracking (RC and Other)	ft	50	12	6	84	42	0	0	4	2
Notes: _										
4000/3:Settlement	each	1	100	1	0	0	0	0	0	0
8398/4:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/4:Wings	each	4	75	3	25	1	0	0	0	0

Remarks: NBI Remarks: Spall at top of barrel & SE wing corner. Wing separating at NE corner, approximately 1 1/4". Horizontal & vertical cracks in all walls with seepage. Spall area in roof center barrel with exposed rebar - 2' x 2' inlet drains in center barrel roof. Some lateral movement center construction joint approximately 1/2". 01/28/2010 - Center construction joint open 1 1/4" both outside walls near bottom. No Change in 2011,2013,2015 or 2017.

Alert Code 1: 8/2017 - Tree drift and debris buildup south end of east and center barrels blocking flow thru channel.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF15

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Grand Forks District	22 Owner	City/Municipal Hwy Agenc
03 County	Gr. Forks	26 Functional	Urban, Minor Arterial
04 City	GRAND FORKS CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ENGLISH COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	11TH AVE.S GRAND FORKS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 54' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 04' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	643974.8 5308236.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1995 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	11,625 30 Year of ADT 2013	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	2.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	40 Ft.	90 Date of Last Inspection	May 11, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	1 01/01/1901
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Smith
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10'X 7'X 52' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF15

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/4:Re Conc Culvert Precast	ft	104	100	104	0	0	0	0	0	0
8398/4:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: [NBI Remarks - Some debris blocking flow thru channel south side. Sidewalk and chain link fence southside.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF16

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Grand Forks District	22 Owner	City/Municipal Hwy Agenc
03 County	Gr. Forks	26 Functional	Urban, Minor Arterial
04 City	GRAND FORKS CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ENGLISH COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	STH 34TH ST. GRAND FORKS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 54' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 04' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	643672.8 5307979.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1996 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	11,625 30 Year of ADT 2013	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	2.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	40 Ft.	90 Date of Last Inspection	May 11, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	5.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	N
48 Length of Max Span	16 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Smith
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10'X 6'X 70' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF16

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/4:Re Conc Culvert Precast	ft	140	100	140	0	0	0	0	0	0
Notes:_										
8401/4:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 5/4/2015 - Volunteer tree growth near the southeast wing.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF17

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Grand Forks District	22 Owner	City/Municipal Hwy Agenc
03 County	Gr. Forks	26 Functional	Urban, Minor Arterial
04 City	GRAND FORKS CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	08620 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LEGAL DRAIN # 9	102 Direction of Traffic	2 2-way traffic
09 Location	SOUTH 48TH ST.	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 54' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 05' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	642063.5 5307360.9	Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden 1	None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 2011 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 2,500 30 Year of ADT	2013	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	4.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 11, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	12/01/2011
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	SU-6-986(082)086
53 Min Vert Clear. Over Bridge	99 Ft. 11 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Smith
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 12' X 6' X 246' PRECAST BOX		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF17

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	492	100	492	0	0	0	0	0	0
Notes: _										
841/1:Re Conc Culvert Precast	ft	492	100	492	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/2011 - New structure in 2011. 5/21/2015 - Some vegetation and sediment buildup north barrel blocking flow.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF07

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Grand Forks District	22 Owner	City/Municipal Hwy Agenc
03 County	Gr. Forks	26 Functional	Urban, Collector
04 City	GRAND FORKS CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08617 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ENGLISH COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	27TH AVE N-GRAND FORKS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.200	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 56' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 04' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 644337.8 5312282.8		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 2018 106 Yr Reconstructed		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 160 30 Year of ADT 2013		71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	January 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 12 X 10 X 76' PCRCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GF07

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	152	100	152	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	1	100	1	0	0	0	0	0	0

Remarks: New in 2018. No riprap on south end due to existing gas line.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 19-114-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Grant	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HEART BUTTE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	18 NORTH 2 EAST OF ELGIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 40' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 48' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	285648.1 5172319.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	44 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	27 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	15 Tons
Age and Service		Appraisal	
27 Yr Built	1942 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	5 30 Year of ADT 2018	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 23, 2018
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	18.4 Ft.	Other Special	N
48 Length of Max Span	31 Ft.	218 Channel Profile	1 48 07/11/2017
49 Structure Length	34.12 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	10/03/2016
51 Bridge Rdwy Width - Curb to Curb	18.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Rossow
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 19-114-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	624	95	593	5	31	0	0	0	0
1090/1:Exposed Rebar	sq.ft	31	0	0	100	31	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	272	0	0	100	272	0	0	0	0
1000/1:Corrosion	ft	272	0	0	100	272	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
215/3:Re Conc Abutment	ft	39	0	0	100	39	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	39	0	0	100	39	0	0	0	0
330/1:Metal Bridge Railing	ft	66	0	0	0	0	0	0	100	66
7000/1:Damage	ft	66	0	0	0	0	0	0	100	66
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
7000/1:Damage	sq.ft	100	0	0	0	0	0	0	100	100
331/1:Re Conc Bridge Railing	ft	66	0	0	0	0	100	66	0	0
1080/1:Delamination/Spall/Patched Area	ft	66	0	0	0	0	100	66	0	0
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1190/3:Abrasion(PSC/RC)	each	4	0	0	100	4	0	0	0	0

Remarks: 10/23/2018 Erosion Behind all Wings NBI Remarks: Minor cracking & scaling of abutments. Spall at nw corner of north abutment 1 1/2' up from bottom. Driving lane is narrow. No bridge rail. NW end marker missing, NE SW SE are in but not to standard

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 19-115-05.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Grant	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	01906 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HEART BUTTE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	18 NORTH 3 EAST OF ELGIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.599	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 39' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 47' 07.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	286910.9 5171210.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 36 65 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 39 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	100 None	209 Posted in "Tons"	32 Tons
Age and Service		Appraisal	
27 Yr Built	1956 106 Yr Reconstructed -1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	55 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	0.00	36 Traffic Safety Features	1 0 0 1
19 Bypass, Detour Length	12 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 23, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 07/11/2017
49 Structure Length	40.03 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	05/03/2018
51 Bridge Rdwy Width - Curb to Curb	23.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Rossow
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 19-115-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	322	100	322	0	0	0	0	0	0
206/3:Timber Column	each	12	100	12	0	0	0	0	0	0
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	49	100	49	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	79	100	79	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10/23/2018: End markers are in but are at ground level**Alert Code 1:** Scour under bridge went from minor 1' to around 4' deep.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 20-110-22.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Griggs	26 Functional	Rural, Local
04 City	HELENA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BALDHILL CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST OF REVERE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 21' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 17' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	553908.1 5244954.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	November 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	21.0 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	22.97 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-20(5)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 11X11X58' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 20-110-22.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	115	96	110	4	5	0	0	0	0
1130/3:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
1900/3:Distortion	ft	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor cracking on wings. 02/28/2011 - Center construction joint open 3/4" with backplate in place and no roadway infiltration. No change in joint opening in 2012,2014,2016 or 2018.

Alert Code 1: Channel bank erosion downstream - See Photo.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 20-113-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Griggs	26 Functional	Rural, Local
04 City	BALL HILL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BALDHILL CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST OF REVERE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 21' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 13' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	558825.5 5244656.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2017	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	November 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	21.0 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	22.97 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	SOS-20(6)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 11X11X58' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 20-113-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	115	97	111	4	4	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	4	0	0	100	4	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0

Remarks: NBI Remarks: Minor spalling & rebar exposed NW, NE & SE wings. Channel bank erosion downstream & around both east wings. 02/28/2011 - Center construction joint open 3/4" with backplate in place, no infiltration. No change in joint separation in 2012, 2014,2016 or 2018.

Alert Code 1: 3' deep scour hole just off both ends of structure.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 20-115-25.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Griggs	26 Functional	Rural, Major Collector
04 City	HANNAFORD CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02026 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BALDHILL CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	AT HANNAFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	11.597	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 18' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 10' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	561818.2 5240310.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1976 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	265 30 Year of ADT 2017	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	35.8 Ft.	Underwater	N
48 Length of Max Span	13 Ft.	Other Special	N
49 Structure Length	26.90 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	ROS-534(3)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 13X14X63' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 20-115-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	240	0	0	100	240	0	0	0	0
1900/3:Distortion	ft	240	0	0	100	240	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0

Remarks: NBI Remarks: Minor scaling center end wall north end some seepage on outside walls. Roadway settlement both ends of the box. Diagonal cracking north wings with seepage. Center construction joint open 1/2" measured @ west outside wall.

Alert Code 1: Moderate erosion behind both north wingwalls.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 20-119-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	35.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Griggs	26 Functional	Rural, Local
04 City	ROMNESS TOWNSHIP	37 Historical Significance	1 Br on Natl Reg Hist PI
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 E 8 N OF COOPERSTOWN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 34' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 05' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	568196.2 5269217.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	2 Critical
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 7 12 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 4 8 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	05 Tons
Age and Service		Appraisal	
27 Yr Built	1912 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	2 Intolerable - Replace
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	13 Ft. 10 In.	90 Date of Last Inspection	December 10, 2019
32 Approach Roadway Width	17 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 12/10/2019
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.7 Ft.	Other Special	N
48 Length of Max Span	97 Ft.	218 Channel Profile	1 48 05/28/2015
49 Structure Length	102.03 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	18.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	10 Ft. 5 In.	216 Inspector	Nefstead, inspector1
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 20-119-07.0

Structure Number: 20-119-07.0

Element / Env. / Description		Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck		sq.ft	1,841	79	1,461	21	380	0	0	0	0
1140/1:Decay/Section Loss		sq.ft	300	0	0	100	300	0	0	0	0
Notes:Decay and molding to various timber planks underside of deck. See Photo. - 12/10/2019											
1180/1:Abrasion		sq.ft	80	0	0	100	80	0	0	0	0
Notes:Wear to top of deck planks. Mainly in the Wheel Paths. - 12/10/2019											
113/2:Steel Stringer		ft	715	0	0	0	0	100	715	0	0
1000/2:Corrosion		ft	715	0	0	0	0	100	715	0	0
Notes:Rusting to all Stringers. See Photo. - 12/10/2019											
515/2:Steel Protective Coating		sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)		sq.ft	100	0	0	0	0	0	0	100	100
Notes:No coating. Loss of Effectiveness - 12/10/2019											
120/2:Steel Truss		ft	203	0	0	0	0	0	0	100	203
1900/2:Distortion		ft	203	0	0	0	0	0	0	100	203
Notes:D-D Members of both sides severely distorted due to inward movement. Damage to West Portal Strut. Rusting to entire truss. See Photos. - 12/10/2019											
515/2:Steel Protective Coating		sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)		sq.ft	100	0	0	0	0	0	0	100	100
Notes:No coating. Loss of Effectiveness. - 12/10/2019											
152/2:Steel Floor Beam		ft	115	0	0	0	0	100	115	0	0
1000/2:Corrosion		ft	115	0	0	0	0	100	115	0	0
Notes:Rusting to All Floor Beams. See Photo. - 12/10/2019											
515/2:Steel Protective Coating		sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)		sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of Effectiveness. - 12/10/2019											
215/3:Re Conc Abutment		ft	36	0	0	0	0	0	0	100	36
1130/3:Cracking (RC and Other)		ft	28	0	0	0	0	0	0	100	28
Notes:Large Horizontal and Vertical Cracking to West Abutment and Northeast Corner of East Abutment. See Photos. - 12/10/2019											
1190/3:Abrasion(PSC/RC)		ft	8	0	0	0	0	0	0	100	8
Notes:Severe abrasion to both abutments with up to 4" of section loss. See Photos. - 12/10/2019											
330/2:Metal Bridge Railing		ft	203	0	0	0	0	0	0	100	203
1000/2:Corrosion		ft	173	0	0	0	0	0	0	100	173
Notes:Rusting to entire railing both sides. See Photo. - 12/10/2019											
7000/2:Damage		ft	30	0	0	0	0	0	0	100	30
Notes:Damage to both railing near East end. See Photo. - 12/10/2019											
515/2:Steel Protective Coating		sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)		sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of effectiveness. - 12/10/2019											
4000/3:Settlement		each	1	0	0	0	0	100	1	0	0
Notes:Inward movement of 7"-9" of both abutments. See photo. - 12/10/2019											

Structure Number: 20-119-07.0

7356/2:Steel Cracking/Fatigue	each	1	100	1	0	0	0	0	0	0
Notes:The end of the eyebars were cracked and repaired by welding plates to the ends of the eyebars. - 12/10/2019										
7363/1:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	0	0	0	0	0	0	100	4
1190/3:Abrasion(PSC/RC)	each	4	0	0	0	0	0	0	100	4
Notes:Severe abrasion to all 4 corners with up to 4" of section loss. See Photo. - 12/10/2019										

Remarks: 02/22/2011 - The ends of all eyebars are cracked and have been repaired by welding plates to the ends of the eyebars. Bridge division notified of repair work April 26, 1993. Posted Narrow Bridge both ends. Channel bank erosion both banks upstream & downstream. 11/2016 - Spall area with deteriorating concrete at the SE corner bearing area of the east abutment with section loss to the connection plate. Inspection incomplete in November 2019 due to the incomplete inspections from 2019 October County Inventory. Inspection complete 12/10/2019. Fracture Critical Inspection Completed with no additional equipment used. Telescoping Ladder for Truss. - 12/10/2019

Alert Code 2: All steel members rusting with minor section loss. - 12/10/2019

Alert Code 3: 2/22/2011 - Severe concrete deterioration to both abutments with up to 4" of section loss. Large diagonal crack at the NE corner of the east abutment open to 2"- 3". Large horizontal and vertical cracks west abutment open up to 1 1/4" to 1 1/2". Both abutments moved in from 7"-9". Lower chord D-D members severely bowed both sides from L0 to L2 & L2' to L0' due to the inward movement of abutments. Severe bank erosion behind west wings. 2/22/2011 - All steel members rusting with some minor section loss. - 12/10/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 21-101-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	49.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Hettinger	26 Functional	Rural, Local
04 City	STREHLOW TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CHANTA PETA CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	11 S. 2 W. NEW ENGLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 22' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 54' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	199576.5 5142419.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 8 15 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 6 12 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	206 Gravel/Dirt	209 Posted in "Tons"	07 Tons
Age and Service		Appraisal	
27 Yr Built	1963 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	10 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 08, 2018
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.7 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 04/18/2019
49 Structure Length	32.15 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	11/30/2016
51 Bridge Rdwy Width - Curb to Curb	18.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 21-101-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	635	100	635	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	289	0	0	100	289	0	0	0	0
1000/1:Corrosion	ft	289	0	0	100	289	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
206/1:Timber Column	each	11	46	5	36	4	18	2	0	0
1140/1:Decay/Section Loss	each	6	0	0	36	4	18	2	0	0
216/1:Timber Abutment	ft	39	0	0	51	20	49	19	0	0
1140/1:Decay/Section Loss	ft	39	0	0	51	20	49	19	0	0
235/1:Timber Pier Cap	ft	39	100	39	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	66	0	0	76	50	0	0	24	16
1020/1:Connection	ft	66	0	0	76	50	0	0	24	16
8401/1:Wings	each	4	50	2	25	1	0	0	25	1
1900/1:Distortion	each	2	0	0	50	1	0	0	50	1

Remarks: NBI Remarks: East abutment and wing plank have been replaced. Sheet piling have been added to end of SW wing to hold embankment. Ice damage to bracing on west abutment. Both exterior and two interior stringers bowed to the north 2". 9/5/17 - removed alert code 2 & 3 for the East abutment and wingwalls. East Piling and Wingwalls were fixed and replaced in 2017. Also fixed the erosion on the East side behind abutment & wings and added riprap.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 21-101-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Hettinger	26 Functional	Rural, Local
04 City	KENNEDY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CHANTA PETA CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	11 S 2 N NEW ENGLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 22' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 54' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	199685.0 5142339.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 50 90 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 28 51 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2000 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	52 Ft.	Other Special	N
49 Structure Length	56.10 Ft.	218 Channel Profile	1 48 04/18/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	05/24/2018
	28.5 Ft.	213 Federal Aid Project Number	DPI-0036(006)211
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 21-101-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,701	100	1,701	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	213	100	213	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	112	100	112	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 9/4/2012 - Minor cracking on bridge deck under the metal rail.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 21-102-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Hettinger	26 Functional	Rural, Local
04 City	KUNZE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N. CANNONBALL RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 W. OF NEW ENGLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 32' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 53' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	201866.2 5161711.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 35 64 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 21 39 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	200 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	May 01, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	65 Ft.	Other Special	N
49 Structure Length	130.00 Ft.	218 Channel Profile	1 48 01/01/2000
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/03/2018
	28.0 Ft.	213 Federal Aid Project Number	BRO-0021(019)
52 Deck Width	30.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	2 In-Place, Functioning
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 21-102-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,932	100	3,932	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	520	100	519	0	1	0	0	0	0
1110/1:Cracking (PSC)	ft	1	100	1	0	0	0	0	0	0
Notes:Minor hairline cracking North diaphragm, see photo. - 5/1/2019										
1120/1:Efflorescence/Rust Staining	ft	1	0	0	100	1	0	0	0	0
Notes:Staining present at hairline crack on diaphragm. - 5/1/2019										
210/1:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	58	100	58	0	0	0	0	0	0
313/3:Fixed Bearing	each	12	100	12	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	260	100	260	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10-8-18- Replacing with new bridge 5.1.19 - Some minor cracking on the North diaphragm w/staining. Note: Area behind West wingwalls on the road we will need to keep an eye on for scour, it is fine at this time of inspection but looks like there could be potential for movement in this area later. - 5/1/2019

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Structure Number: 21-103-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	33.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Hettinger	26 Functional	Rural, Local
04 City	EW ENGLAND TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CANNONBALL RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF NEW ENGLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 31' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 52' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	203376.4 5160462.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	1 Concrete	Load Rating and Posting	
		31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	2	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 22 40 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 11 21 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	33 Asphalt	209 Posted in "Tons"	15 Tons
Age and Service		Appraisal	
27 Yr Built	1912 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	2 Intolerable - Replace
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	500 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 30, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 10/30/2019
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	20.0 Ft.	Other Special	N
48 Length of Max Span	71 Ft.	218 Channel Profile	1 48 04/18/2019
49 Structure Length	147.97 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	19.0 Ft.	213 Federal Aid Project Number	SAP 220
52 Deck Width	20.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Strand
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 21-103-07.0

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 21-103-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,111	0	0	58	1,804	42	1,303	0	4
1080/1:Delamination/Spall/Patched Area	sq.ft	3,096	0	0	58	1,804	42	1,292	0	0
Notes:wearing surface is completely worn off in many areas spalling with exposed rebar on underside of deck - 10/30/2019										
1090/1:Exposed Rebar	sq.ft	7	0	0	0	0	71	5	29	2
Notes:delam and spalled areas on underside of deck have exposed areas of rebar - 10/30/2019										
1120/1:Efflorescence/Rust Staining	sq.ft	6	0	0	0	0	100	6	0	0
Notes:Staining present on underside of deck at various locations. - 10/30/2019										
7000/1:Damage	sq.ft	2	0	0	0	0	0	0	100	2
Notes:Hole in the deck near SE end just North of L1 South, approx. 6"x12" through deck - 10/30/2019										
510/1:Wearing Surfaces	sq.ft	3,111	0	0	52	1,611	48	1,500	0	0
3210/1:Del/Spall/Patch/Pot(Wear Sur)	sq.ft	3,111	0	0	52	1,611	48	1,500	0	0
Notes:deck overlayed with armour coat material, spalled and potholes throughout. - 10/30/2019										
110/1:Re Conc Opn Girder/Beam	ft	381	75	287	0	0	23	86	2	8
Notes:diaphragm cracked and spalling on pier 2 n - 10/30/2019										
1080/1:Delamination/Spall/Patched Area	ft	47	0	0	0	0	92	43	9	4
Notes:spalling and delamination on bottom of beams with exposed rebar - 10/30/2019										
1090/1:Exposed Rebar	ft	47	0	0	0	0	92	43	9	4
Notes:span 3 spalling and exposed rebar on bottom of beams. - 10/30/2019										
113/1:Steel Stringer	ft	420	0	0	50	210	50	210	0	0
1000/1:Corrosion	ft	420	0	0	50	210	50	210	0	0
Notes:rusting and flaking off - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Protective coating failed, metal is rusting and some areas are starting to flake off. - 10/30/2019										
120/1:Steel Truss	ft	141	0	0	62	88	38	53	0	0
1000/1:Corrosion	ft	138	0	0	64	88	36	50	0	0
Notes:Minor section loss and pitting on rivet bottom chord connections, interior face rivets pitted at top chord connections. - 10/30/2019										
7000/1:Damage	ft	3	0	0	0	0	100	3	0	0
Notes:Collision damage on members U2-l2 north end - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	141	0	0	65	91	36	50	0	0
Notes:protective system failing causing metal underneath to corrode. - 10/30/2019										
152/1:Steel Floor Beam	ft	125	0	0	0	0	100	125	0	0
1000/1:Corrosion	ft	125	0	0	0	0	100	125	0	0
Notes:bottom chord some section loss at panel members, rivet faces are also starting to corrode or pit - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:failed - 10/30/2019										
204/1:Pre Conc Column	each	4	0	0	25	1	75	3	0	0

Structure Number: 21-103-07.0

1110/1:Cracking (PSC)	each	4	0	0	25	1	75	3	0	0
Notes:tops of piers beginning to deteriorate outside truss bearing areas, also cracking under beam seats and thru columns. - 10/30/2019										
215/1:Re Conc Abutment	ft	46	0	0	94	43	7	3	0	0
1080/1:Delamination/Spall/Patched Area	ft	23	0	0	87	20	13	3	0	0
Notes:delam areas under beam seats n / s - 10/30/2019										
1130/1:Cracking (RC and Other)	ft	23	0	0	100	23	0	0	0	0
Notes:minor cracking s abut and north - 10/30/2019										
233/1:Pre Conc Pier Cap	ft	46	0	0	100	46	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	23	0	0	100	23	0	0	0	0
Notes:tops of piers beginning to deteriorate outside truss bearing areas. diaphragm cracked and spalling on pier 2, diaphragms cracked over pier 2/3 - 10/30/2019										
1110/1:Cracking (PSC)	ft	23	0	0	100	23	0	0	0	0
Notes:tops of piers beginning to deteriorate outside truss bearing areas. diaphragm cracked and spalling on pier 2, diaphragms cracked over pier 2/3 - 10/30/2019										
330/1:Metal Bridge Railing	ft	295	0	0	83	245	9	25	9	25
1000/1:Corrosion	ft	275	0	0	89	245	9	25	2	5
Notes:rusting and flaking off - 10/30/2019										
7000/1:Damage	ft	20	0	0	0	0	0	0	100	20
Notes:Rail has collision damage and some of the posts are missing, see photos. - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	50	50	50	50
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	100	0	0	0	0	50	50	50	50
Notes:protective system failed, metal corroding underneath. - 10/30/2019										
331/1:Re Conc Bridge Railing	ft	295	0	0	68	200	32	95	0	0
1080/1:Delamination/Spall/Patched Area	ft	295	0	0	68	200	32	95	0	0
Notes:Curb is cracking and spalling/delaminated entire structure. - 10/30/2019										
7363/1:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:entire structure has minor section loss from corrosion. - 10/30/2019										
8401/1:Wings	each	4	0	0	50	2	50	2	0	0
1080/1:Delamination/Spall/Patched Area	each	2	0	0	0	0	100	2	0	0
Notes:SE and SW wings have spalling, SE has exposed rebar also - 10/30/2019										
1130/1:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
Notes:all wings have cracking - 10/30/2019										

Remarks: NBI Remarks: Posts missing on structure * (approach spans.) Deck overlaid with armour coat material, truss and rail rusting and paint flaking off. Diaphragms cracked over pier 2 & 3. Curb cracking, spalling & concrete deterioration. U2 - I2 members north end have collision damage. 1"- 2" deflection in approach spans. 10-8-18-NW cable guardrail damaged also metal bridge rail cracked and broke NE side also NW corner and SE Minor section loss on rivets on bottom chord connections. Interior face of rivets pitted at top chord connections. Bottom chord section loss at panel connections. see pix. 11/2010 - Pier 3 has erosion around columns. 6/24/2014 - Tops of piers beginning to deteriorate outside truss bearing areas. 6/24/2014 - FC done. 10/18/2016 -Deflection south span approximately 3-4". diaphragm cracked and spalling on pier two(N) wearing surface is completely worn off in many areas. 10-30-19 not much change wings have spall and cracks - 10/30/2019

Alert Code 1: Some section loss on top chord at curb line. map cracking on all four columns. - 10/30/2019

Alert Code 2: Beams at span 3 have spalling, concrete deterioration & exposed rebar. Pier cap 2 & 3 has spalling, concrete deterioration & exposed rebar. Soffit on span 2 has exposed rebar, spalling & concrete deterioration. - 10/30/2019

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Structure Number: 21-103-07.0

Alert Code 3: 10/18/2016 soffit of entire structure has delamination spalling and cracking with exposed rebar and with leaks through out. Deck has hole completely through deck near SE end just north of L1 south. approximately 6"x12" in size. - 10/30/2019

Fracture Critical: 10.30.19 - FCM inspection done with no changes from previous FCM inspection. - 10/30/2019

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SEC 409

Structure Number: 21-104-20.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Hettinger	26 Functional	Rural, Local
04 City	KENNEDY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CHANTA PETA CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	13 S. 1 E. NEW ENGLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 20' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 51' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	203098.7 5139014.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 45 82 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	203 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	47 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 05/02/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	212 Structure Load Rated	05/24/2018
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	BRO-21(2)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Structure Number: 21-104-20.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	400	100	400	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	98	100	98	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor spalls to 4 Tee beams. 10-8-18-SE bridge marker missing

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SEC 409

Structure Number: 21-104-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	26.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Hettinger	26 Functional	Rural, Local
04 City	KENNEDY TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CHANTA PETA CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	14 S. 1 E. NEW ENGLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 19' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 50' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	204312.4 5137355.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 11 21 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 7 13 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	20 Tons
Age and Service		Appraisal	
27 Yr Built	1915 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 30, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.7 Ft.	Other Special	N
48 Length of Max Span	26 Ft.	218 Channel Profile	1 48 04/18/2019
49 Structure Length	27.89 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	11/30/2016
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Strand
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 21-104-21.0

Structure Number: 21-104-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	506	0	0	100	506	0	0	0	0
Notes:some new planks have been added. - 10/30/2019										
1140/1:Decay/Section Loss	sq.ft	506	0	0	100	506	0	0	0	0
Notes:Some new planks were added, old planks still showing section loss. - 10/30/2019										
107/1:Steel Opn Girder/Beam	ft	253	0	0	4	10	96	243	0	0
1000/1:Corrosion	ft	213	0	0	0	0	100	213	0	0
Notes:Metal corroding with some minor section loss - 10/30/2019										
1900/1:Distortion	ft	40	0	0	25	10	75	30	0	0
Notes:west outside beam bent and bowing into structure, next 2 beams from the west possible bowing too. - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:failed metal is corroding with section loss in some areas. - 10/30/2019										
215/1:Re Conc Abutment	ft	36	0	0	0	0	50	18	50	18
Notes:Erosion and undermining South and North abutments with piling exposed, south abutment looks pushed in at base 2-1/2". - 10/30/2019										
1080/1:Delamination/Spall/Patched Area	ft	15	0	0	0	0	60	9	40	6
Notes:spalling / delamination or scaling on both abutments. - 10/30/2019										
1090/1:Exposed Rebar	ft	3	0	0	0	0	0	0	100	3
Notes:exposed rebar in spalled areas - 10/30/2019										
1130/1:Cracking (RC and Other)	ft	18	0	0	0	0	50	9	50	9
Notes:south abut large vertical crack 1/2 to 3/4" - 10/30/2019										
231/1:Steel Pier Cap	ft	36	0	0	0	0	69	25	31	11
1000/1:Corrosion	ft	25	0	0	0	0	100	25	0	0
Notes:cap corroding - 10/30/2019										
1900/1:Distortion	ft	11	0	0	0	0	0	0	100	11
Notes:bent at sw corner and bowed in middle - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:failed causing metal to corrode - 10/30/2019										
330/1:Metal Bridge Railing	ft	56	0	0	0	0	0	0	100	56
7000/1:Damage	ft	56	0	0	0	0	0	0	100	56
Notes:rail bent down and and pushed out - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:failed causing metal to corrode. - 10/30/2019										
332/1:Timb Bridge Railing	ft	56	0	0	100	56	0	0	0	0
1160/1:Crack (Timber)	ft	56	0	0	100	56	0	0	0	0
Notes:curbing is cracked and weathered - 10/30/2019										
8401/1:Wings	each	4	0	0	0	0	50	2	50	2

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 21-104-21.0

Notes:All 4 wings have cracking and delamination. - 10/30/2019											
1130/1:Cracking (RC and Other)	each	2	0	0	0	0	100	2	0	0	0
Notes:All 4 wings have cracking - 10/30/2019											
1900/1:Distortion	each	2	0	0	0	0	0	0	100	2	0
Notes:South wings eroded on bottom and leaning. - 10/30/2019											

Remarks: NBI Remarks: Curb on deck is cracked and weathered. NW corner missing. Embankment erosion along roadway along SW & SE wings and along south channel bank. West outside beam is bent. 2 bolts missing at north abutment where beams meet it. North abutment has section loss at base of abutment. West 3 stringers are bowed to the east 1" - 10/30/2019

Alert Code 1: Erosion & undermining at bottom of south abutment & some on the North. 11/2010 - RAIL ON STRUCTURE BENT DOWN AND PUSHED OUT. STEEL CAP BENT AT SW CORNER - and bowed in the middle. - 10/30/2019

Alert Code 3: 11/2010 - SOUTH ABUTMENT LARGE VERTICAL CRACKS 1/2" TO 3/4". CONCRETE WALLS ON ABUTMENTS ARE SPALLING, SCALLING, CRACKED AND DETERIORATING. ALSO EXPOSED AND RUSTING PILING. SOUTH ABUTMENT PUSHED IN AT BASE 2 1/2". - 10/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 21-107-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	51.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Hettinger	26 Functional	Rural, Local
04 City	WAGENDORF TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CHANTA PETA CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	16 S. 4 E. NEW ENGLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 17' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 46' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	208999.7 5134022.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 12 22 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 7 14 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	18 Tons
Age and Service		Appraisal	
27 Yr Built	1941 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	5 30 Year of ADT 2018	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 08, 2018
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	18.7 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	1 48 04/18/2019
49 Structure Length	36.09 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	11/30/2016
51 Bridge Rdwy Width - Curb to Curb	18.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 21-107-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	721	0	0	97	702	3	19	0	0
1140/1:Decay/Section Loss	sq.ft	19	0	0	0	0	100	19	0	0
107/1:Steel Opn Girder/Beam	ft	325	0	0	100	325	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
206/1:Timber Column	each	13	15	2	77	10	8	1	0	0
216/1:Timber Abutment	ft	43	0	0	47	20	54	23	0	0
235/1:Timber Pier Cap	ft	43	0	0	100	43	0	0	0	0
332/1:Timb Bridge Railing	ft	72	0	0	28	20	0	0	72	52
7000/1:Damage	ft	72	0	0	28	20	0	0	72	52
8401/1:Wings	each	4	0	0	50	2	50	2	0	0

Remarks: NBI Remarks: Curb support blocks loose under bridge. 9/4/2012 - Bridge deck planks are loose. 6/27/2014 - 11th deck plank from the north is broken and warped. 10/20/2016 - Only half of railing is standing on west side. 10-8-18 - East bridge rail missing , erosion behind nw/sw wings

Alert Code 1: Pile starting to decay on both abutments. Out side layer of pile is cracked and can peel away some of the wood.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 21-114-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	38.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Hettinger	26 Functional	Rural, Local
04 City	BLACK BUTTE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CANNONBALL RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 N. 4 W. OF REGENT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 27' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 38' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	220894.8 5151138.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	2 Critical
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	K Closed to all traffic
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 13 24 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 8 14 Tons
208 Dk Overburden	1 None	70 Bridge Posting	1 30.0-39.9%below
Age and Service		209 Posted in "Tons"	20 Tons
27 Yr Built	1944 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	2 Intolerable - Replace
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	26 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	16 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	18 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.3 Ft.	Underwater	N
48 Length of Max Span	69 Ft.	Other Special	N
49 Structure Length	153.87 Ft.	218 Channel Profile	1 48 05/02/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	22.3 Ft.	212 Structure Load Rated	05/29/2018
52 Deck Width	24.0 Ft.	213 Federal Aid Project Number	WER-4(8)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Martin, Strand
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 21-114-12.0

Structure Number: 21-114-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,692	95	3,507	5	185	0	0	0	0
Notes:spalling/delamination at joints. - 10/30/2019										
1085/1:Delamination	sq.ft	185	0	0	100	185	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	617	0	0	100	617	0	0	0	0
Notes:gravel build up between beams - 10/30/2019										
1000/1:Corrosion	ft	617	0	0	100	617	0	0	0	0
Notes:Beams starting to show signs of corrosion - 10/30/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Starting to fail. - 10/30/2019										
210/1:Re Conc Pier Wall	ft	49	100	49	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	49	100	49	0	0	0	0	0	0
233/1:Pre Conc Pier Cap	ft	49	0	0	45	22	0	0	55	27
Notes:gravel build up between beam and cap affecting movement. 10-10-18 nw/ne cap on pier 2 showing more deterioration and loss of bearing area. pier cap at pier 3 west side has exposed rebar and deterioration , pier cap 2 has major concrete deterioration. - 10/30/2019										
1080/1:Delamination/Spall/Patched Area	ft	10	0	0	0	0	0	0	100	10
Notes:pier 2 major concrete deterioratation - 10/30/2019										
1090/1:Exposed Rebar	ft	10	0	0	0	0	0	0	100	10
Notes:pier 3 exposed rebar pier cap 2 exposed rebar west end end pier cap. - 10/30/2019										
1110/1:Cracking (PSC)	ft	17	0	0	71	12	0	0	29	5
Notes:Cracking on entire pier cap and concrete deteriorating - 10/30/2019										
1120/1:Efflorescence/Rust Staining	ft	12	0	0	83	10	0	0	17	2
Notes:Staining at cracked and delaminated locations on cap. - 10/30/2019										
311/3:Moveable Bearing	each	4	100	4	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Showing signs of initial failure. - 10/30/2019										
313/3:Fixed Bearing	each	12	83	10	0	0	0	0	17	2
2240/3:Loss of Bearing Area	each	2	0	0	0	0	0	0	100	2
Notes:pier 2 loss of bearing area . concrete deterioration advanced at ext bearing plates at pier 2 - 10/30/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:beginning stages of failure. - 10/30/2019										
330/1:Metal Bridge Railing	ft	308	100	308	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	50	50	50	50	0	0	0	0
Notes:fading - 10/30/2019										
3410/1:Chalk(Steel Protect Coatings)	sq.ft	50	0	0	100	50	0	0	0	0
Notes:chalking - 10/30/2019										
331/1:Re Conc Bridge Railing	ft	308	100	308	0	0	0	0	0	0

Structure Number: 21-114-12.0

8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Stringers have a slight bow down approx 3/4". Rockers on pier #3 (south) are straight up & down. Gravel buildup between beams & upper pier cap effecting movement of beams, south side of pier 2. Concrete and steel beams from old structure remain under bridge. Concrete spalling on deck at construction joints. West girder bent 1 1/2" from ice damage. 11/05/2011 - Structure remains the same. 8/31/2012 - Structure remains the same. 12/27/2013 - 3 cores have been taken at west end of pier cap 2. 12/10/2015 - 3 cores taken at pier 3 middle of pier cap. 12/20/2015 - Continued deterioration of pier caps 2 and 3. 10/18/2016 - Pier 2 west end has exposed bolt at diaphragm next to girder. 9/5/17 - Scour & slight undermining starting @ North abutment. 10-10-18- NW/NE pier cap on pier 2 showing more deterioration and loss of bearing area. Called co. rd foreman lee meir, will meet me out there to look at also called brandon nddot, lee asked for 24 hrs they have a comission mtg tonight will discuss it he wants to bring out comisioner out to look at. I recommend closing, lee said if I need to it will be done, only serves farmer to north. Will call by noon tomorrow, lee also asked about lowering tons down, I said that was up to him He thought about 8 tons, but will let know tomorrow. Brandon and I (phil) went out next day 10-11-18 and county was closing bridge. 10-30-19 updated photos bridge still closed - 10/30/2019

Alert Code 2: 11/2010 - CONCRETE DETERIORATION ADVANCING AT EXT. BEARING PLATES AT PIER 2. PIER CAP AT PIER 3 WEST SIDE HAS EXPOSED REBAR AND CONCRETE DETERIORATION. 10/18/2016 - Some exposure of rebar between the girders on east end of pier 2. 7/22/2014 - East end deteriorating more now and has some exposed rebar. - 10/30/2019

Alert Code 3: 11/2010 - PIER CAP ON PIER 2 HAS MAJOR CONCRETE DETERIORATION. 12/27/2013 - Pier cap on pier 2 has continued to deteriorate exposing more rebar on west end of pier cap. Also concrete below bearing seat continues to deteriorate. 10/18/2016 - Deterioration on west end of pier cap 2 has advanced closer to the external bearing with some exposure of rebar between the girders. 9/5/17 - Remains the same as of recent pictures. 10.30.19 - remains closed. - 10/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 21-119-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	26.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Hettinger	26 Functional	Rural, Local
04 City	FARINA TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 N. 1 E. OF REGENT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 26' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 31' 40.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	229027.4 5149222.1	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 15 27 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 11 21 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	15 Tons
Age and Service		Appraisal	
27 Yr Built	1936 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 30, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.1 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	1 48 04/15/2019
49 Structure Length	37.07 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	11/30/2016
51 Bridge Rdwy Width - Curb to Curb	16.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Strand
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 21-119-14.0

Structure Number: 21-119-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
3171/Timber Deck	sq.ft	689	0	0	100	689	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	689	0	0	100	689	0	0	0	0
Notes:some plank cracked and weathered. - 10/30/2019										
10771/Steel Opn Girder/Beam	ft	335	0	0	0	0	100	335	0	0
Notes:bolts missing @ abut where it meets the beams nw and se corners - 10/30/2019										
100071/Corrosion	ft	335	0	0	0	0	100	335	0	0
Notes:Beams corroding - 10/30/2019										
51571/Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:failed - 10/30/2019										
21571/Re Conc Abutment	ft	43	0	0	0	0	0	0	100	43
1080/1:Delamination/Spall/Patched Area	ft	21	0	0	0	0	0	0	100	21
Notes:severe disenegration of concrete n-s abutment - 10/30/2019										
109071/Exposed Rebar	ft	22	0	0	0	0	0	0	100	22
Notes:exposed rebar footings undermined, deterioriating at waterline and exposed rebar - 10/30/2019										
23171/Steel Pier Cap	ft	43	0	0	0	0	100	43	0	0
100071/Corrosion	ft	43	0	0	0	0	100	43	0	0
Notes:corroding - 10/30/2019										
51571/Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:failed causing metal to corrode. - 10/30/2019										
33071/Metal Bridge Railing	ft	75	0	0	0	0	67	50	33	25
Notes:bent up and pushed out - 10/30/2019										
100071/Corrosion	ft	50	0	0	0	0	100	50	0	0
Notes:Metal showing signs for corrosion - 10/30/2019										
190071/Distortion	ft	25	0	0	0	0	0	0	100	25
Notes:rail bent up and pushed out - 10/30/2019										
51571/Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:failed causing metal to corrode. - 10/30/2019										
33271/Timb Bridge Railing	ft	75	0	0	93	70	0	0	7	5
Notes:cracked, split, loose - 10/30/2019										
102071/Connection	ft	5	0	0	0	0	0	0	100	5
Notes:Planks cracked and not connected in these areas. - 10/30/2019										
117071/Split/Delamination (Timber)	ft	70	0	0	100	70	0	0	0	0
Notes:railing splitting / deteriorating. - 10/30/2019										
840171/Wings	each	4	0	0	0	0	0	0	100	4
108071/Delamination/Spall/Patched Area	each	2	0	0	0	0	0	0	100	2
Notes:All 4 wings have spalling/delamination to some degree. - 10/30/2019										

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SEC 409

Structure Number: 21-119-14.0

1130/1:Cracking (RC and Other)	each	2	0	0	0	0	0	0	100	2
Notes:All 4 wings have major cracking. - 10/30/2019										

Remarks: NBI Remarks: Steel rail bent up and pushed out. Timber curb cracked, split and loose. Timber deck have some plank cracked and weathered. 10/20/2016 - Road leads to one rural house only. 27 ton weight limit possibly somewhat high. 9/5/17 -Posted @ 15 Ton. 10-10-18- Severe disintegration of concrete n-s abutment. Exposed rebar footings undermined. 10.30.19 - notes under defects. - 10/30/2019

Alert Code 1: Some holes in concrete. Bolts missing @ abut where it meets the beams,nw & se corners. All pile exposed on both abuts at ground elevation. - 10/30/2019

Alert Code 3: 10/20/2016 - ABUTMENT CONCRETE IN POOR CONDITION, CRACKED, SCALING, DETERIORATING AT WATERLINE AND EXPOSED REBAR. 9/5/17 - Remains the same. - 10/30/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-113-23.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Major Collector
04 City	GOLDEN GLEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02311 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 3 SOUTH OF EDGELEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.400	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 18' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 45' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	517988.7 5128687.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 60 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 36 Tons
208 Dk Overburden	305 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	17 Tons
27 Yr Built	1975 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	150 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 05, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.5 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/01/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	30.5 Ft.	212 Structure Load Rated	08/24/2017
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Carlson, Wegner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 23-113-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	249	96	238	4	11	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes: _										
1120/2:Efflorescence/Rust Staining	ft	10	0	0	100	10	0	0	0	0
206/3:Timber Column	each	14	93	13	7	1	0	0	0	0
1150/3:Check/Shake	each	1	0	0	100	1	0	0	0	0
Notes: _										
216/3:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes: _										
331/2:Re Conc Bridge Railing	ft	49	96	47	4	2	0	0	0	0
1130/2:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0

Remarks: There is a small spall on the west beam. 4/2016 - Center rotted on 2 SW wing piling and 1 SE wing piling. Minor cracking mid span all beams. End markers in place but are improperly installed.

Alert Code 1: Scour under bridge 5' wide 20' long 1' deep

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-113-24.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Major Collector
04 City	GOLDEN GLEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
04 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER BRANCH	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 5 SOUTH OF EDGELEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.800	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 17' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 45' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	518019.9 5125967.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 30 55 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 33 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	308 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1975 106 Yr Reconstructed	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	120 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	14.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 05, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	30.5 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 05/01/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/24/2017
51 Bridge Rdwy Width - Curb to Curb	30.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Carlson, Wegner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 23-113-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	249	91	226	9	23	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	200	2	0	0	0	0
Notes: _										
1090/2:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	20	0	0	100	20	0	0	0	0
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	52	98	51	0	0	2	1	0	0
1170/1:Split/Delamination (Timber)	ft	1	0	0	0	0	100	1	0	0
Notes: _										
330/2:Metal Bridge Railing	ft	49	0	0	100	49	0	0	0	0
1000/2:Corrosion	ft	49	0	0	100	49	0	0	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes: _										
331/2:Re Conc Bridge Railing	ft	49	100	49	0	0	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0

Remarks: Minor damage to NW & SE wingwalls. Three small spalls on exterior west channel beam. End piling on SE wing is split. Split on west end of north abutment cap. Timber Abutment is crushing 1/8" to a 1/4" at all beams. 4/2016 - 2 piling on SE wing and 1 piling on the SW are rotted out in the center. Minor cracking mid span all beams. West side end markers improperly installed. Small spall and exposed rebar 2nd channel beam from the east.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-115-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City	GOLDEN GLEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
04 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF EDGELEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 20' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 43' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	521197.7 5131717.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 46 83 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	202 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 05, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	09/10/2018
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	OS-23(1) SITE 6
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Carlson, Wegner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-115-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	197	100	197	0	0	0	0	0	0
206/3:Timber Column	each	10	100	10	0	0	0	0	0	0
216/3:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	49	96	47	4	2	0	0	0	0
1130/2:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
Notes: _										
332/2:Timb Bridge Railing	ft	49	82	40	0	0	0	0	18	9
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: End markers in place but improperly installed. Damage to guardrail SE & SW corners.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-116-22.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City	GOLDEN GLEN TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 1 EAST OF EDGELEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 19' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 42' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	522810.7 5130267.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 35 63 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 21 38 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	206 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1935 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	24 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 05, 2018
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	20.0 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/01/2017
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	09/10/2018
51 Bridge Rdwy Width - Curb to Curb	20.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Wegner, Carlson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 23-116-22.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	667	94	627	6	40	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	11	100	11	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	40	0	0	100	40	0	0	0	0
110/2:Re Conc Opn Girder/Beam	ft	151	0	0	80	120	21	31	0	0
1080/2:Delamination/Spall/Patched Area	ft	24	0	0	0	0	100	24	0	0
Notes: _										
1090/2:Exposed Rebar	ft	7	0	0	0	0	100	7	0	0
Notes: _										
1120/2:Efflorescence/Rust Staining	ft	12	0	0	100	12	0	0	0	0
Notes: _										
1130/2:Cracking (RC and Other)	ft	108	0	0	100	108	0	0	0	0
215/3:Re Conc Abutment	ft	43	67	29	0	0	33	14	0	0
1080/3:Delamination/Spall/Patched Area	ft	8	0	0	0	0	100	8	0	0
Notes: _										
1090/3:Exposed Rebar	ft	6	0	0	0	0	100	6	0	0
Notes: _										
331/2:Re Conc Bridge Railing	ft	59	64	38	36	21	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	12	0	0	100	12	0	0	0	0
Notes: _										
1090/2:Exposed Rebar	ft	8	0	0	100	8	0	0	0	0
Notes: _										
1130/2:Cracking (RC and Other)	ft	1	0	0	100	1	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: 3' spall east beam mid span with exposed rebar. 2'x2' collision damage to rail NW & NE corners. Steel exposed Spall and exposed rebar on both ends of west beam at bearing area. Map cracking on all beams throughout.

Alert Code 2: Exposed steel on abutments NW and SE corner.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-117-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City	MORA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 1 EAST OF EDGELEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 23' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 41' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	523389.9 5136799.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 46 83 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	202 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1982 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	April 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/01/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	09/10/2018
	27.9 Ft.	213 Federal Aid Project Number	BRO-23(7)
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Carlson, Wegner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-117-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	200	100	200	0	0	0	0	0	0
202/3:Steel Column	each	10	0	0	100	10	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/3:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
Notes: _										
217/3:Masonry Abutment	ft	59	100	59	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	59	100	59	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	49	94	46	6	3	0	0	0	0
1130/2:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	0	0	0	0	0	0	100	2
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: No bridge end markers. Minor rust on piling at waterline. Moderate erosion at all 4 corners.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-118-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City	MORA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 NORTH OF EDGELEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 22' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 39' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	525994.9 5135429.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2014 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	April 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	23.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	12/01/2014
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Carlson, Wegner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
11 X 6 X 45 PCRBC		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-118-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	90	87	78	13	12	0	0	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	69	83	57	17	12	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 1/2016 - Minor longitudinal cracking. Minor cracking on east parapet.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-119-22.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City	WILLOWBANK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 2 SOUTH EDGELEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 19' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 38' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	527653.7 5129619.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 40 72 Tons
208 Dk Overburden	201 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	April 05, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	24 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	212 Structure Load Rated	09/11/2018
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	SOS-23(4)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Carlson, Wegner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-119-22.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	1	100	1	0	0	0	0	0	0
520/3:Conc Re Prot Sys	sq.ft	1	100	1	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	200	100	200	0	0	0	0	0	0
202/3:Steel Column	each	10	0	0	100	10	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
219/3:Stl Abutment	ft	66	0	0	100	66	0	0	0	0
Notes: _										
1000/3:Corrosion	ft	66	0	0	100	66	0	0	0	0
Notes: _										
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
Notes: _										
3410/3:Chalk(Steel Protect Coatings)	sq.ft	100	0	0	100	100	0	0	0	0
Notes: _										
330/2:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	0	0	0	0	100	2
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Cap is welded to pile and abutment as one unit. SW wing, one piling is bent from ice damage. Erosion NE,NW, and SW

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-120-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	68.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City	WILLOWBANK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST OF EDGELEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 20' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 37' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	529236.1 5132818.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 37 67 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 22 40 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	207 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	30 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 04, 2018
32 Approach Roadway Width	19 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.4 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/01/2017
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	09/11/2018
51 Bridge Rdwy Width - Curb to Curb	19.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	21.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Carlson, Wegner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-120-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	646	99	636	2	10	0	0	0	0
Notes:_										
1130/3:Cracking (RC and Other)	sq.ft	10	0	0	100	10	0	0	0	0
Notes:_										
110/3:Re Conc Opn Girder/Beam	ft	151	80	121	20	30	0	0	0	0
Notes:_										
1080/3:Delamination/Spall/Patched Area	ft	18	0	0	100	18	0	0	0	0
Notes:_										
1090/3:Exposed Rebar	ft	6	0	0	100	6	0	0	0	0
Notes:_										
1130/3:Cracking (RC and Other)	ft	6	0	0	100	6	0	0	0	0
Notes:_										
215/3:Re Conc Abutment	ft	53	66	35	34	18	0	0	0	0
Notes:_										
1080/3:Delamination/Spall/Patched Area	ft	12	0	0	100	12	0	0	0	0
Notes:_										
1090/3:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
Notes:_										
1130/3:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:_										
331/3:Re Conc Bridge Railing	ft	59	100	59	0	0	0	0	0	0
Notes:_										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:_										
8401/3:Wings	each	4	75	3	0	0	25	1	0	0
Notes:_										

Remarks: E & W beam- delamination on bottom. No end markers or bridge rail. Small spalls on both abutments, steel exposed. Spall on east beam 8' long with exposed rebar. Spall on west exterior beam 6' long, steel exposed. 2ft.X2ft.spall with exposed steel NE wingwall. 2nd beam from the west 3 cracks in bearing area.

Alert Code 1: Scour hole downstream. Erosion behind all wings.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-120-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City	WILLOWBANK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 3 SOUTH EDGELEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 18' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 37' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	529272.3 5129075.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Slab		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 43 77 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 23 42 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1956 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	30 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 04, 2018
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	20 Ft.	218 Channel Profile	1 48 05/01/2017
49 Structure Length	21.98 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	09/11/2018
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Carlson, Wegner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-120-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
38/1:Re Concrete Slab	sq.ft	549	91	502	9	47	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	10	0	0	100	10	0	0	0	0
Notes: _										
1090/1:Exposed Rebar	sq.ft	10	0	0	100	10	0	0	0	0
Notes: _										
1130/1:Cracking (RC and Other)	sq.ft	27	0	0	100	27	0	0	0	0
Notes: _										
215/3:Re Conc Abutment	ft	49	67	33	31	15	2	1	0	0
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	0	0	100	1	0	0
Notes: _										
1090/3:Exposed Rebar	ft	5	0	0	100	5	0	0	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes: _										
330/2:Metal Bridge Railing	ft	43	0	0	54	23	0	0	47	20
1000/2:Corrosion	ft	43	0	0	54	23	0	0	47	20
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
331/2:Re Conc Bridge Railing	ft	43	100	43	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	50	2	25	1	0	0	25	1

Remarks: East guardrail is missing. Spalling/section loss on abutments at water line, reinforcing steel visible. Bridge end markers are missing. Exposed steel on bottom of deck. Spalling with exposed steel on wings. Spall on south side bottom of deck.

Alert Code 2: Concrete spalling with exposed steel in south abutment. Large scour hole downstream.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-121-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City	WILLOWBANK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 3 SOUTH OF EDGELEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 18' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 36' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	529628.0 5128763.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 28 51 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1984 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	April 05, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	56 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 05/01/2017
50 Curb/Sidewalk Widths	2.0 Ft Rt-Side	Chaining Date	None
	2.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	09/11/2018
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	BRO-23(10)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Carlson, Wegner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-121-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,938	99	1,926	1	12	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	6	0	0	100	6	0	0	0	0
Notes: _										
1130/1:Cracking (RC and Other)	sq.ft	6	0	0	100	6	0	0	0	0
Notes: _										
104/1:Pre Clsd Box Girder	ft	240	100	240	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	94	62	5	3	2	1	0	0
1085/2:Delamination	ft	1	0	0	100	1	0	0	0	0
Notes: _										
1130/2:Cracking (RC and Other)	ft	3	0	0	67	2	33	1	0	0
Notes: _										
331/2:Re Conc Bridge Railing	ft	121	94	114	6	7	0	0	0	0
1130/2:Cracking (RC and Other)	ft	7	0	0	100	7	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Two cracks on bottom of deck with efflorescence.**Alert Code 1:** Moderate erosion behind NE wingwall.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-121-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City	WILLOWBANK TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 4 SOUTH EDGELEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 17' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 35' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	530887.1 5127401.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 55 99 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 37 68 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	209 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1935 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	24 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 24, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 06/24/2019
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	09/12/2018
51 Bridge Rdwy Width - Curb to Curb	23.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Carlson, Wegner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 23-121-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	581	100	581	0	0	0	0	0	0
110/2:Re Conc Opn Girder/Beam	ft	144	66	95	34	49	0	0	0	0
1130/2:Cracking (RC and Other)	ft	49	0	0	100	49	0	0	0	0
215/3:Re Conc Abutment	ft	49	0	0	96	47	4	2	0	0
330/2:Metal Bridge Railing	ft	49	0	0	0	0	49	24	51	25
1000/2:Corrosion	ft	49	0	0	0	0	49	24	51	25
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
331/2:Re Conc Bridge Railing	ft	49	86	42	14	7	0	0	0	0
1130/2:Cracking (RC and Other)	ft	7	0	0	100	7	0	0	0	0
Notes: _										
8398/1:Slope Protection	each	2	0	0	0	0	0	0	100	2
8401/3:Wings	each	4	50	2	25	1	0	0	25	1

Remarks: Normal underside deck cracking. Beams have cracking at mid point. West rail is gone. 9 inches of gravel on deck. Channel is obstructed by heaving of concrete floor. Spalling all four corners of bridge below beams. 5/2016 - 2' spall on NE corner of abutment.

Alert Code 1: Two foot scour hole east of bridge. Moderate cracking on beams and abutments. SW wingwall has a moderate crack. There are no bridge end markers. 1ft. spall NW corner of abutment.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-122-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City	WANO TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COTTONWOOD CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 2 NORTH OF BERLIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 24' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 34' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	532419.9 5139748.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	April 12, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	21.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-23(14)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Belanger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X7X44' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-122-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	89	87	77	14	12	0	0	0	0
1130/3:Cracking (RC and Other)	ft	12	0	0	100	12	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/1:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: Minor cracks in headwalls & walls.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-122-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City	WILLOWBANK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 3 SOUTH OF EDGELEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 18' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 34' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	532498.0 5128781.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 05, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	22.97 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-23(13) SITE 2
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Carlson, Wegner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 9X7X56' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-122-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	112	76	85	24	27	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	3	0	0	100	3	0	0	0	0
Notes:_										
1130/3:Cracking (RC and Other)	ft	24	0	0	100	24	0	0	0	0
Notes:_										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/1:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: Minor cracks in walls and wings. Minor erosion by NW wingwall.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-129-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City	ROSCOE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BONEHILL CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 2 SOUTH OF DICKEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 30' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 26' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	542549.0 5149967.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1962 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	April 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	9 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Belanger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 9X10X30' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-129-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	89	83	74	17	15	0	0	0	0
1130/3:Cracking (RC and Other)	ft	15	0	0	500	15	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/1:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: Approx 2ft. Cover over box. Lacks guardrail. No end markers NE & SW corners. Minor cracking with some leaching. Several small spalls on wings and center walls, west side. Debris in channel.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-132-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City	DEAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COTTONWOOD CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 2 SOUTH OF LAMOURE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 19' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 22' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	548556.1 5130440.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1989 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	April 09, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-23(12)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Belanger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10X6X56' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-132-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	167	90	151	9	15	1	1	0	0
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	14	0	0	93	13	7	1	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/1:Headwalls	each	2	50	1	50	1	0	0	0	0
1130/1:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes: _										

Remarks: Minor hairline to 1/16" cracks in headwalls. Spall on north wall 2' x 2'. 1' x 1' spall on the east headwall.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-133-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City	DEAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COTTONWOOD CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 3 SOUTH OF LAMOURE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 18' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 20' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	550184.7 5129007.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 47 85 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	April 09, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	56 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 04/28/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	09/24/2018
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	BRO-23(9)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Belanger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-133-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,798	99	1,783	1	15	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	3	0	0	100	3	0	0	0	0
Notes: _										
1130/1:Cracking (RC and Other)	sq.ft	12	0	0	100	12	0	0	0	0
Notes: _										
104/3:Pre Clsd Box Girder	ft	230	100	230	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	59	93	55	7	4	0	0	0	0
1130/3:Cracking (RC and Other)	ft	4	100	4	0	0	0	0	0	0
Notes: _										
331/2:Re Conc Bridge Railing	ft	121	70	85	30	36	0	0	0	0
1130/2:Cracking (RC and Other)	ft	36	0	0	100	36	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-135-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	26.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City	GRAND RAPIDS TOWNSHI	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	NORTH OF LAMOURE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 22' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 18' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	553062.7 5135526.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	3 Steel	Load Rating and Posting	
		31 Design Load	Unknown
45 No. Spans in Main Unit	1		P Posted for load
46 No. Approach Spans	2	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 11 20 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 5 10 Tons
208 Dk Overburden	1 None	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	8 Tons
27 Yr Built	1910 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	2 Intolerable - Replace
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	1	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	3 Intolerable - Correct
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	15 Ft. 7 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	April 12, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	18 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	Y 24 11/10/2016
47 Total Horizontal Clearance	15.4 Ft.	Underwater	N
48 Length of Max Span	108 Ft.	Other Special	N
49 Structure Length	131.89 Ft.	218 Channel Profile	1 48 06/24/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	15.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	15 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 23-135-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	2,110	0	0	0	0	100	2,110	0	0
1150/1:Check/Shake	sq.ft	2,110	0	0	0	0	100	2,110	0	0
113/3:Steel Stringer	ft	791	0	0	0	0	0	0	100	791
1900/3:Distortion	ft	791	0	0	0	0	0	0	100	791
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
120/3:Steel Truss	ft	217	0	0	0	0	100	217	0	0
1000/3:Corrosion	ft	217	0	0	0	0	100	217	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
152/3:Steel Floor Beam	ft	85	0	0	0	0	100	85	0	0
1000/3:Corrosion	ft	85	0	0	0	0	100	85	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
202/3:Steel Column	each	14	93	13	0	0	7	1	0	0
1000/3:Corrosion	each	1	0	0	0	0	100	1	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
219/3:Stl Abutment	ft	33	0	0	100	33	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
231/3:Steel Pier Cap	ft	33	100	33	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
311/3:Moveable Bearing	each	2	0	0	100	2	0	0	0	0
1000/3:Corrosion	each	2	0	0	100	2	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
313/3:Fixed Bearing	each	2	0	0	100	2	0	0	0	0
1000/3:Corrosion	each	2	0	0	100	2	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
330/3:Metal Bridge Railing	ft	262	0	0	0	0	100	262	0	0
1000/3:Corrosion	ft	262	0	0	0	0	100	262	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
7362/3:Superstructure Traffic Impact	each	1	0	0	0	0	0	0	100	1
8401/3:Wings	each	4	75	3	0	0	0	0	25	1

Structure Number: 23-135-18.0

Remarks: 11/3/2010 - Load Limit signs in place. Moderate to heavy rust on all steel. Floor beam number 2 is bent. U1 to L1 & L2, distorted. U5 to L4 & L5, distorted. Moderate section loss on SW column. Both outside deck planks on the west approach are sticking up. Concrete in the SW column is starting to rubblize. Moderate section loss SW Column. E abutment cap is distorted. 113 Linear feet of stringers are displaced with reduced load carrying capacity. No settlement evident. 3/12/2007 - Collision damage lateral cross brace east end gusset plate torn SE Corner. 9/4/2007 - Gusset plate on upper SE corner has been welded. Some section loss on steel casing SW column. Fasteners have been replaced on ends of lateral bracing. One missing on south end. 3 of the 17ft. deck planks have about 3/4" section loss. I talked to County Road Supt. Josh Logrein, they are going to have their engineering firm look at this bridge.

Alert Code 1: Lateral overhead bracing has collision damage. Some loose bolts on west abutment cap.*

Alert Code 3: Eleven stringers are out of alignment. One is no longer bearing on the floor beam. Eight of nine rivets are sheared off on top band of SW column.*80% section loss on top edge of SW Column. (This area supports the bearing plate for the SW corner of the truss system)

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-137-22.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Major Collector
04 City	RYAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02335 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 2 SOUTH OF LAMOURE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.500	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 19' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 15' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	556607.1 5129897.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 28 50 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 30 Tons
208 Dk Overburden	301 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1975 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	206 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	April 03, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	56 Ft.	Other Special	N
49 Structure Length	148.95 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	09/25/2018
	28.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-137-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	1,490	100	1,490	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	59	93	55	7	4	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes: _										
215/2:Re Conc Abutment	ft	59	95	56	5	3	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes: _										
1130/2:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
Notes: _										
330/2:Metal Bridge Railing	ft	299	99	297	1	2	0	0	0	0
7000/2:Damage	ft	2	0	0	100	2	0	0	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3420/2:Peel/Bub/Crack(Stl Protect Co)	sq.ft	100	0	0	100	100	0	0	0	0
Notes: _										
331/2:Re Conc Bridge Railing	ft	299	96	288	4	11	0	0	0	0
1130/2:Cracking (RC and Other)	ft	11	0	0	122	11	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Adjacent beams, no deck. Minor popouts on north abutment and pier. Minor rust on bridge railing. Minor cracks on north pier. Collision damage to NW guardrail.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-138-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City	RYAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COTTONWOOD CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 4 SOUTH OF LAMOURE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 17' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 15' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	556791.0 5127340.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 49 88 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 29 53 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	201 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	10 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 03, 2018
32 Approach Roadway Width	10 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	N
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	09/25/2018
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-138-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	603	99	597	1	6	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	6	0	0	100	6	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	144	61	88	39	56	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
Notes: _										
1130/1:Cracking (RC and Other)	ft	46	0	0	100	46	0	0	0	0
Notes: _										
215/1:Re Conc Abutment	ft	49	94	46	6	3	0	0	0	0
1130/1:Cracking (RC and Other)	ft	3	0	0	150	3	0	0	0	0
Notes: _										
330/1:Metal Bridge Railing	ft	49	0	0	100	49	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	49	96	47	0	0	4	2	0	0
1130/1:Cracking (RC and Other)	ft	2	0	0	0	0	200	2	0	0
Notes: _										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor cracks and spalling. No end markers. Structure exists on a dirt trail. Minor cracking at midspan of all beams. Minor cracking on abutments.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-138-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COTTONWOOD CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 5 SOUTH LAMOURE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 16' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 15' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	556746.7 5125747.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1997 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 09, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CPF-23(97B)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Belanger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10'X8'X44' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-138-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	89	90	80	10	9	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes: _										
1120/3:Efflorescence/Rust Staining	ft	1	0	0	100	1	0	0	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	7	0	0	100	7	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/2:Headwalls	each	2	100	2	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-139-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City	RYAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 5 SOUTH OF LAMOURE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 16' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 14' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	558458.5 5125754.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 40 72 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	April 09, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	49 Ft.	Other Special	N
49 Structure Length	129.92 Ft.	218 Channel Profile	1 48 05/24/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	10/08/2018
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	BRO-23(5)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Belanger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-139-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,183	65	2,719	35	1,464	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	1,464	0	0	100	1,464	0	0	0	0
Notes: _										
104/2:Pre Clsd Box Girder	ft	515	100	515	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	66	100	66	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	97	64	3	2	0	0	0	0
1130/2:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
331/1:Re Conc Bridge Railing	ft	259	79	204	21	55	0	0	0	0
1130/1:Cracking (RC and Other)	ft	55	0	0	100	55	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor spalling and cracking on deck. Minor crack on north beam of span one. Beaver damage to both guardrail posts/moderate section loss. Minor eroison NW & SE wingwall. Moderate erosion NE wingwall. S.W. & N.E. concrete end posts are cracked.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-148-11.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City	BLACK LOAM TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 NORTH 2 EAST OF VERONA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 28' 40.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 02' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	574156.2 5147598.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 31 57 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 18 34 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	206 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1930 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	10 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 10, 2018
32 Approach Roadway Width	10 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	18.7 Ft.	Other Special	N
48 Length of Max Span	27 Ft.	218 Channel Profile	1 48 04/28/2017
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	19.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-148-11.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	657	95	624	5	33	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	33	0	0	100	33	0	0	0	0
Notes: _										
110/3:Re Conc Opn Girder/Beam	ft	151	98	148	0	0	2	3	0	0
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
Notes: _										
1090/3:Exposed Rebar	ft	1	0	0	0	0	100	1	0	0
Notes: _										
215/3:Re Conc Abutment	ft	43	0	0	100	43	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	43	0	0	100	43	0	0	0	0
Notes: _										
331/3:Re Conc Bridge Railing	ft	59	95	56	5	3	0	0	0	0
1130/3:Cracking (RC and Other)	ft	3	100	3	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	0	0	0	0	0	0	100	2

Remarks: Medium conc. Scaling on deck and railing. Minor surface cracks on super structure. Minor surface cracks and light spalling on abutments. Erosion around all four corners of bridge. No end markers. Exposed reinforcing steel on east beam

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-148-19.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Major Collector
04 City	OVID TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02320 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH 2 EAST OF VERONA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.799	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 21' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 02' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	573933.9 5133924.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1976 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	83 30 Year of ADT 2018	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 03, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	34.12 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	ER-123(3)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Belanger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 9X11X47' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-148-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	141	72	101	26	37	2	3	0	0
1130/3:Cracking (RC and Other)	ft	40	0	0	123	37	10	3	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/2:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: Cracks on headwalls where wing barrels and headwalls meet. Minor cracking on parapet and east barrel. Bridge end markers are back to back. Minor crack on NE wingwall.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-148-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	LaMoure	26 Functional	Rural, Local
04 City		37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 S 2 E OF VERONA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 17' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 02' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	573177.9 5127503.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 53 96 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 38 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1976 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	April 16, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	40 Ft.	Other Special	N
49 Structure Length	42.00 Ft.	218 Channel Profile	1 04/28/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	28.0 Ft.	212 Structure Load Rated	12/11/2012
52 Deck Width	28.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Belanger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	0.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 23-148-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	336	100	336	0	0	0	0	0	0
206/1:Timber Column	each	10	50	5	40	4	10	1	0	0
1150/1:Check/Shake	each	5	0	0	100	4	25	1	0	0
Notes: _										
216/1:Timber Abutment	ft	62	95	59	0	0	5	3	0	0
7000/1:Damage	ft	3	0	0	0	0	100	3	0	0
Notes: _										
235/3:Timber Pier Cap	ft	62	89	55	0	0	11	7	0	0
Notes: _										
1160/3:Crack (Timber)	ft	7	0	0	0	0	100	7	0	0
Notes: _										
331/1:Re Conc Bridge Railing	ft	84	100	84	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 05/12/2014 - Ice damage to NE & NW abutment piling and the timber abutment wall. Minor crushing of the timber cap SW corner.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 24-102-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Logan	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST 14 SOUTH NAPOLEON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 17' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 52' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	432597.6 5126973.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 40 72 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 24 43 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1996 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	1 1 0 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	91.86 Ft.	218 Channel Profile	1 48 06/07/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	10/10/2018
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	DPI-0036(002)241
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 24-102-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
38/1:Re Concrete Slab	sq.ft	2,809	100	2,809	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	43	100	43	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	86	100	86	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	141	100	141	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	99	99	1	1	0	0	0	0
Notes:14 ft of the rail is in CS2. - 10/16/2019										
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	99	99	1	1	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 3/28/2017: NBI Remarks: Some cracks visible underside of deck,efflorescence visible. 12/17/2018: No Changes
10/16/2019: No Changes - 10/16/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 24-103-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Logan	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 13 SOUTH NAPOLEON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 18' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 51' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	433749.5 5129084.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 46 84 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 22 41 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1984 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	November 18, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	94.16 Ft.	218 Channel Profile	1 48 06/07/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	10/10/2018
52 Deck Width	29.5 Ft.	213 Federal Aid Project Number	BRO-24(3)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 24-103-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,777	100	2,777	0	0	0	0	0	0
Notes:Hairline cracking with some efflorescence visible underside of deck. Crack spacing is 3-5'. NE and NW end markers missing. - 11/18/2019										
104/1:Pre Clsd Box Girder	ft	377	100	377	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	187	100	187	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 3/28/2017: NBI Remarks: Minor cracking on deck, cracks on bottom show some efflorescence. SW & SE end markers are missing. 6" X 36" honeycomb near bottom on north side of pier. 12/17/2018: No Changes
10/16/2019: No Changes - 11/18/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 24-105-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Logan	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 9 SOUTH NAPOLEON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 22' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 49' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	437154.3 5135573.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 46 84 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 22 41 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.5 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	102.03 Ft.	218 Channel Profile	1 48 06/07/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.5 Ft.	212 Structure Load Rated	10/10/2018
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	BRO-24(2)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 24-105-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,122	100	3,122	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	407	100	407	0	0	0	0	0	0
210/2:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	203	100	203	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	80	80	20	20
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	0	0	80	80	20	20
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 3/28/2017: NBI Remarks: NE+SW end markers leaning, NW+SE end markers missing. Paint on bridge rail starting to fail. 12/17/2018: No Changes 10/08/2019: No Changes - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 24-105-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Logan	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 12 SOUTH NAPOLEON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 19' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 48' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	437413.4 5130615.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 37 67 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1967 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.8 Ft.	Underwater	N
48 Length of Max Span	58 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 06/07/2017
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	34.1 Ft.	213 Federal Aid Project Number	CS-938(3)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 24-105-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,045	100	2,045	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	240	100	240	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	69	81	56	19	13	0	0	0	0
1130/3:Cracking (RC and Other)	ft	69	81	56	19	13	0	0	0	0
331/2:Re Conc Bridge Railing	ft	121	100	121	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 3/28/2017: NBI Remarks: Minor cracking on abutments. 2"x6" long spall where back- wall meets abutment, SW corner and NE corner. Minor hairline cracks both backwalls. Old concrete with rebar sticking up in channel. NW, NE, & SW end markers gone. 12/17/2018: Hairline cracks now showing some efflorescence 10/16/2019: No Changes. Due to high water we were unable to get a picture of the slope protection. - 10/16/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 24-106-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	56.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Logan	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 8 SOUTH NAPOLEON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 23' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 47' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	439190.0 5137304.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 20 36 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 13 25 Tons
Dk Protect	None	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	12 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	3 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 08, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	18.7 Ft.	Other Special	N
48 Length of Max Span	27 Ft.	218 Channel Profile	1 48 06/07/2017
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	12/30/2016
51 Bridge Rdwy Width - Curb to Curb	18.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 24-106-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	581	0	0	0	0	100	581	0	0
1180/1:Abrasion	sq.ft	581	0	0	0	0	100	581	0	0
107/1:Steel Opn Girder/Beam	ft	249	0	0	100	249	0	0	0	0
1000/1:Corrosion	ft	249	0	0	100	249	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
215/3:Re Conc Abutment	ft	39	0	0	0	0	0	0	100	39
1130/3:Cracking (RC and Other)	ft	39	0	0	0	0	0	0	100	39
330/2:Metal Bridge Railing	ft	62	0	0	100	62	0	0	0	0
1000/2:Corrosion	ft	62	0	0	100	62	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
8401/2:Wings	each	4	0	0	75	3	25	1	0	0
1130/2:Cracking (RC and Other)	each	4	0	0	75	3	25	1	0	0

Remarks: 4/5/2017 - No paint remains on steel elements. Riprap rock dam under structure. 4/5/2017: NBI Remarks: Posted 12 ton. Concrete deteriorating. Damaged planks have been replaced. Bridge division comments: abutments have been stabilized. County is closely monitoring situation. No change dec. 95, nov. 97, jan.2000 & nov. 2003 & 10-17-05. Plank has 5" hole. No End Markers. 12/17/2018: Checked the leaning of the abutments and found: South abutment leaning 3 1/2" in 4' and north abutment leaning 3 1/4" in 4' 10/08/2019: South wings have no fill behind them. SE wing has a 20'x10' scour hole. NW wing has a small scour hole. New wearing surface planks have been placed on the deck. - 10/8/2019

Alert Code 2: 4/5/2017: North abutment leaning 0.8 inches per foot. South abutment leaning inwards 0.9 inches per foot. Major cracking in backwalls & wings. Spalling at bearing points. South abutment has 2 vertical cracks full length and approx. 3/8" wide and 3 full length vertical cracks at 1/8" to 1/4". North abutment has 2 cracks 3/8" wide and 3 cracks 1/8" to 1/4" wide. - 10/8/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 24-110-17.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	88.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Logan	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02416 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 8 SOUTH NAPOLEON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	14.197	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 23' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 43' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	444359.8 5137096.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 34 62 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	33 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1961 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	115 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	3 SC - Unstable
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.2 Ft.	Underwater	N
48 Length of Max Span	37 Ft.	Other Special	N
49 Structure Length	41.01 Ft.	218 Channel Profile	1 48 06/07/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	24.6 Ft.	213 Federal Aid Project Number	CS-882(3)
52 Deck Width	27.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 24-110-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	367	100	367	0	0	0	0	0	0
206/3:Timber Column	each	10	100	10	0	0	0	0	0	0
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	82	0	0	73	60	27	22	0	0
7000/2:Damage	ft	82	0	0	73	60	27	22	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 3/28/2017: NE approach guardrail has a damaged section. N Beam 6" spall on the north face at the west end. 25 MPH speed limit across bridge due to rough road. Guardrail has minor damage due to fire. 12/10/2018: No Changes 10-8-2019: NE Guardrail has 2' of damage and the SE Guardrail has 20' of damage - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 24-113-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	63.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Logan	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	14 WEST OF LEHR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 17' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 38' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	450330.4 5125894.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 13 24 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 8 15 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	15 Tons
Age and Service		Appraisal	
27 Yr Built	1948 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	50 30 Year of ADT 2019	72 App. Rdwy. Alignment	2 Intolerable - Replace
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 07, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	32 Ft.	218 Channel Profile	1 48 06/07/2017
49 Structure Length	35.10 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	22.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 24-113-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	840	0	0	100	840	0	0	0	0
1180/1:Abrasion	sq.ft	840	0	0	100	840	0	0	0	0
111/1:Timber Open Girder	ft	351	100	351	0	0	0	0	0	0
206/3:Timber Column	each	10	0	0	100	10	0	0	0	0
1180/3:Abrasion	each	10	0	0	100	10	0	0	0	0
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	69	0	0	100	69	0	0	0	0
1150/2:Check/Shake	ft	69	0	0	100	69	0	0	0	0
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	0	0	75	3	0	0	25	1
1180/3:Abrasion	each	3	0	0	100	3	0	0	0	0
7000/3:Damage	each	1	0	0	0	0	0	0	100	1

Remarks: NBI Remarks: Piling in wings are decayed. East curb and se wing damaged. All end markers missing. One pile in se wing is split. 05/12/2015: Both load limit signs are in place. 12/10/2018: 2 pile on the NE wing and 1 pile on the SW wing have the top 1' completely rotted, 90% section loss in the top 1'. 10-7-2019: No Changes - 10/7/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 24-114-17.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Logan	26 Functional	Rural, Major Collector
04 City	RED LAKE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02416 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	AT BURNSTAD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	18.496	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 23' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 38' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	451229.6 5137011.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	303 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	48 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	December 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	42.3 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	45.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBRS-2416(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUADRUPLE, 11X8X44' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 24-114-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	177	81	144	19	33	0	0	0	0
1130/3:Cracking (RC and Other)	ft	33	0	0	100	33	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
1130/3:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
8402/2:Headwalls	each	2	50	1	50	1	0	0	0	0
1130/2:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0

Remarks: NBI Remarks: Cracks where parapets meet wings. Construction joints open 1". Some spalling on interior walls north side of structure hairline cracks in all common walls. East 2 barrels,north end have some settlement,3/4" from edge of 2nd barrel to 1 1/4" at the east edge of east barrel. 2 west barrels have 1/4" or less. 02/26/2013: SW end marker damaged and NW end marker leaning. 12/10/2018: No Changes

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 24-115-18.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Logan	26 Functional	Rural, Major Collector
04 City	RED LAKE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02416 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST OF BURNSTAD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	19.196	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 22' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 37' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	452121.0 5136376.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	48 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	58.0 Ft.	Underwater	N
48 Length of Max Span	13 Ft.	Other Special	N
49 Structure Length	26.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	08/17/2018
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRC-CNOC-2416(069)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 12 X 8 X 58' PCRCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 24-115-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	116	100	116	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 8/2018 - Bridge being replaced with a double box RCB. 9/4/2018 - Project complete. 12/10/2018: New Condition
10/08/2019: No Changes - 10/8/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 24-116-18.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Logan	26 Functional	Rural, Major Collector
04 City	RED LAKE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02416 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST OF BURNSTAD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	20.496	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 22' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 35' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	454045.3 5136723.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	48 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	December 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	42.0 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	45.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	ER-2416(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUADRUPLE, 11X8X42' DROP INLET RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 24-116-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	167	88	147	12	20	0	0	0	0
1130/3:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
8402/2:Headwalls	each	2	0	0	100	2	0	0	0	0
1130/2:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
8403/3:Drop Inlet	each	1	0	0	100	1	0	0	0	0

Remarks: 03/26/2012: Minor shrinkage cracks where wings meet parapet. Minor hairline cracks in all wings. 12/10/2018:
No Changes

Alert Code 1: The center;line pipe 25 ft west of this box is separated and causing a hole next to the north side of the road.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 24-116-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Logan	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 6 SOUTH BURNSTAD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 17' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 35' 40.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	454221.2 5127267.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 41 74 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 28 51 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	28 Gravel/Dirt	209 Posted in "Tons"	11 Tons
Age and Service		Appraisal	
27 Yr Built	1939 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 07, 2019
32 Approach Roadway Width	23 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	25.3 Ft.	Other Special	N
48 Length of Max Span	15 Ft.	218 Channel Profile	1 48 06/07/2017
49 Structure Length	34.12 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 24-116-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	904	0	0	100	904	0	0	0	0
1180/1:Abrasion	sq.ft	904	0	0	100	904	0	0	0	0
111/1:Timber Open Girder	ft	476	86	409	14	67	0	0	0	0
1180/1:Abrasion	ft	67	0	0	100	67	0	0	0	0
210/3:Re Conc Pier Wall	ft	26	0	0	0	0	100	26	0	0
4000/3:Settlement	ft	26	0	0	0	0	100	26	0	0
215/3:Re Conc Abutment	ft	52	0	0	50	26	50	26	0	0
1130/3:Cracking (RC and Other)	ft	26	0	0	0	0	100	26	0	0
1190/3:Abrasion(PSC/RC)	ft	26	0	0	100	26	0	0	0	0
332/2:Timb Bridge Railing	ft	69	0	0	100	69	0	0	0	0
1180/2:Abrasion	ft	69	0	0	100	69	0	0	0	0
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Inslopes are very steep at structure. No end markers. Poor sight distance from west due to vertical curve. Spall on east abut. 3'x 1'. West abut leaning in 1.5" in 4'. Center pier leaning to the east 1" in 4'.
 12/10/2018: Bridge railing missing on both sides. 10/07/2019: Center pier has major settling. South end has 1' of timber shims between top of pier and bottom of deck. - 10/7/2019

Alert Code 1: A large shear crack on the ne corner of the abutment where the wing meets, full height of abutment, no misalignment of deck observed. West load limit sign missing.02/25/2013: Changed item 41 to "Posting Recommended" due to missing load limit sign. 12/10/2018: 7'x2' spall @ NE corner of abutment - 10/7/2019

Alert Code 2: East abutment is moving, now at 4.0" in 4', was 3.5" last inspection - 10/7/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 25-101-17.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McHenry	26 Functional	Rural, Major Collector
04 City	DEERING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02501 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE DEEP CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST OF DEERING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.799	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 23' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 02' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	349130.8 5362540.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 39 71 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 41 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1982 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	118 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	November 02, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.2 Ft.	Underwater	N
48 Length of Max Span	47 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 05/28/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	30.2 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	BRS-2501(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 25-101-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	367	100	367	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	98	0	0	100	98	0	0	0	0
1000/1:Corrosion	ft	98	0	0	100	98	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Edges of concrete deck have minor chips. Approach embankments have settled, making approaches slightly rough. Shallow spalls along bottom of one of the beams. Small trees beginning to obstruct streambed.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 25-104-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McHenry	26 Functional	Rural, Local
04 City	PRATT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CUT BANK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 14 NORTH DEERING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 35' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 58' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	354555.8 5384834.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	201 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2015 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 02, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	57.45 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/12/2015
	0.0 Ft.	213 Federal Aid Project Number	BRO-0025(010)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
QUAD 12 X 12 X 92' RCB			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 25-104-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	368	100	368	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes: _										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: New box in 2015.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 25-104-09.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McHenry	26 Functional	Rural, Major Collector
04 City	GRILLEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02510 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	11 E 0.5 S OF GLENBURN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.799	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 30' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 58' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	353834.4 5373986.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2014 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	November 02, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	38.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	02/06/2014
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRC-2510(052)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
TRIPLE 12 X 7 X 62' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 25-104-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	186	100	186	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 25-108-04.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McHenry	26 Functional	Rural, Major Collector
04 City	DEEP RIVER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02506 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE DEEP CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 WEST OF UPHAM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	7.798	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 34' 29.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 53' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	360455.9 5381907.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	G New-Not Yet Open
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 32 58 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden		70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	150 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	November 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	42.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	52.67 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	Ft Rt-Side	Chaining Date	None
	Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	28.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	Ft.	213 Federal Aid Project Number	BRC-2506(065)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
Quad 12'x12' Precast RCBC		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 25-108-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	240	100	240	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: _ - 11/13/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 25-113-13.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	39.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McHenry	26 Functional	Rural, Local
04 City	GILMORE TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BANK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 9 SOUTH OF UPHAM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 26' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 46' 52.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	368292.2 5367166.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	1 Imminent Failure
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 0 0 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 0 0 Tons
Dk Protect	None	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	24 Tons
Age and Service		Appraisal	
27 Yr Built	1939 106 Yr Reconstructed -1	67 Structural Condition	0 Closed
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	5 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 12, 2019
32 Approach Roadway Width	10 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.6 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 09/04/2015
49 Structure Length	27.89 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 25-113-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	646	0	0	100	646	0	0	0	0
1150/1:Check/Shake	sq.ft	646	0	0	100	646	0	0	0	0
Notes:Weathered - 9/12/2019										
111/1:Timber Open Girder	ft	233	0	0	100	233	0	0	0	0
1150/1:Check/Shake	ft	233	0	0	100	233	0	0	0	0
206/1:Timber Column	each	10	0	0	40	4	60	6	0	0
1150/1:Check/Shake	each	4	0	0	100	4	0	0	0	0
1170/1:Split/Delamination (Timber)	each	6	0	0	0	0	100	6	0	0
Notes:Rotation of cap has caused moderate to severe vertical splits in piling. - 9/12/2019										
216/1:Timber Abutment	ft	59	0	0	0	0	100	59	0	0
1900/1:Distortion	ft	59	0	0	0	0	100	59	0	0
235/1:Timber Pier Cap	ft	59	0	0	100	59	0	0	0	0
1150/1:Check/Shake	ft	59	0	0	100	59	0	0	0	0
332/1:Timb Bridge Railing	ft	56	0	0	79	44	0	0	21	12
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	0	0	25	1	0	0	75	3

Remarks: 11/2/2010- Large Section of S. Rail missing. Moderate voids under girders where deck extends beyond abuts. 1-2' deck edges exposed. Pile centers of wingwalls decaying. Lateral movement of channel piling cracked. - 9/12/2019

Alert Code 2: 11/2010 - Portions of bottom of both abuts exposed. N half of E abut planks are 2-4' shorter than the rest. Scour has exposed bottom of SE wing, both stabilizing planks are ruptured, old wing is separated from bridge, attached new wing made of 2x4"s 4' away from old wing. Remaining wings are leaning. Large washouts back of all wings have exposed deck edge. W. Abut leaning back 2-3". Rotation of cap has caused moderate to severe vertical splits in piling. E. Abut leaning back 5-6" . - 9/12/2019

Critical Finding Structure still closed to traffic. Structure closed at present. Oct. 2018 - 9/12/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 26-102-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	83.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	McIntosh	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02603 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	10 NORTH OF ZEELAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	11.897	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 06' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 50' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	435335.7 5107028.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 34 62 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 15 29 Tons
208 Dk Overburden	31 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1965 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	98 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	July 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	58 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 07/23/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.2 Ft.	213 Federal Aid Project Number	CS-839(2)
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Carlson, Wegner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 26-102-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	600	100	600	0	0	0	0	0	0
Notes:There is a chip seal on the surface of the box girders. - 7/24/2019										
215/3:Re Conc Abutment	ft	59	0	0	86	51	14	8	0	0
Notes:It appears that both south and north abutment have tipped in 2" at the top. - 7/24/2019										
1080/3:Delamination/Spall/Patched Area	ft	4	0	0	25	1	75	3	0	0
Notes:On the north abutment there is 3 SF of spall on the east side of abutment located at beam seat. On the south abutment there is a 1 SF of spall on west side of abutment located at the beam seat. - 7/24/2019										
1120/3:Efflorescence/Rust Staining	ft	12	0	0	67	8	33	4	0	0
Notes:North abutment has 5' on the east end and 3' on the west end of #2 efflorescence. South abutment has 4' on the east end of #3 efflorescence. - 7/24/2019										
1130/3:Cracking (RC and Other)	ft	43	0	0	98	42	2	1	0	0
Notes:Both abutments are map cracked throughout. The south abutment has a #3 crack vertical in the middle of the abutment the runs from top to bottom. - 7/24/2019										
330/1:Metal Bridge Railing	ft	121	98	119	1	1	1	1	0	0
Notes:Farmers gate is anchored to north rail. - 7/24/2019										
1020/1:Connection	ft	2	0	0	50	1	50	1	0	0
Notes:Both are located on the west rail where farmer has connected his gates to bridge rail. - 7/24/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	121	86	104	9	11	5	6	0	0
1080/1:Delamination/Spall/Patched Area	ft	6	0	0	0	0	100	6	0	0
Notes:West rail has a 3 sf spall and a 1 sf spall at metal guardrail connection. East rail has a 2 sf spall on outside of rail. - 7/24/2019										
1130/1:Cracking (RC and Other)	ft	52	79	41	21	11	0	0	0	0
Notes:West rail has 19 #1 and 6 #2. East rail has 22 #1 and 5 #2. - 7/24/2019										
8398/3:Slope Protection	each	2	0	0	0	0	100	2	0	0
Notes:Both the north and south slope protection is missing. - 7/24/2019										
8401/3:Wings	each	4	0	0	75	3	25	1	0	0
Notes:SE wing has #2 efflorescence. - 7/24/2019										
1080/3:Delamination/Spall/Patched Area	each	1	0	0	0	0	100	1	0	0
Notes:1 SF of spall on the SE wing. - 7/24/2019										
1130/3:Cracking (RC and Other)	each	3	0	0	100	3	0	0	0	0
Notes:All wings show map cracking the SE wing has #3 cracking. - 7/24/2019										

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 26-104-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	63.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	McIntosh	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	11 NORTH 2 EAST ZEELAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 07' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 47' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	438587.7 5108328.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	4 Considerable Damage
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	M 13.5 (H 15) (live load for which structure was designated)
45 No. Spans in Main Unit	4	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 24 44 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden N	Not Applicable	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1932 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	N Not applicable (NBI)
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	N N 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 24, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.0 Ft.	Other Special	N
48 Length of Max Span	7 Ft.	218 Channel Profile	N
49 Structure Length	37.07 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Carlson, Wegner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
QUAD, 6-8X5-10X44' SPPA			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 26-104-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	177	0	0	73	129	27	48	0	0
1000/3:Corrosion	ft	122	0	0	98	120	2	2	0	0
Notes:All pipes have corrosion on the bottoms. Pipe 3 has 2' of total section loss at east end of barrel. - 7/24/2019										
1900/3:Distortion	ft	46	0	0	0	0	100	46	0	0
Notes:All pipes show signs of sagging in middle. (The amount of sage can not be determined due to inaccessibility) - 7/24/2019										
6000/3:Scour	ft	4	0	0	100	4	0	0	0	0
Notes:Scour on both ends of all 4 pipes. - 7/24/2019										
7000/3:Damage	ft	5	0	0	100	5	0	0	0	0
Notes:Ice damage on inlet end of pipes (east end) on pipes 1,2,3. - 7/24/2019										
515/3:Steel Protective Coating	sq.ft	100	50	50	0	0	50	50	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	50	50	0	0	50	50	0	0
Notes:Bottom of pipes are rusting.(see pictures) - 7/24/2019										

Remarks: Poor stream alignment. No end markers. Rip rap in pipe 4. - 7/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 26-106-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	87.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	McIntosh	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 WEST 6 SOUTH WISHEK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 45' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	441895.5 5114129.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	4 Considerable Damage
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1954 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	2 Intolerable - Replace
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	July 31, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	33.14 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CS-195(3)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Carlson, Wegner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10X5X32' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 26-106-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	95	0	0	83	79	11	10	6	6
1080/3:Delamination/Spall/Patched Area	ft	87	0	0	91	79	9	8	0	0
Notes:CS 2 the ceiling of all three barrels show delamination throughout the entire length. CS 3 there is a 8'x2' spall/delamination along water line between barrel 2 and 3 on east end. Normal width of wall was 9.5" it is now 6.5 at the narrowest part with 6' of exposed rebar. - 7/31/2019										
1090/3:Exposed Rebar	ft	6	0	0	0	0	0	0	100	6
Notes:6' of exposed rebar on wall between barrel 3 and 2. - 7/31/2019										
1120/3:Efflorescence/Rust Staining	ft	0	0	0	0	0	0	0	0	0
Notes:Efflorescence throughout all barrels on the ceiling, floor, and walls. - 7/31/2019										
1130/3:Cracking (RC and Other)	ft	2	0	0	0	0	100	2	0	0
Notes:CS2 cracking throughout all barrels. There is a CS3 crack in barrels 2 and 3 4.5' in from the west end of box. - 7/31/2019										
1190/3:Abrasion(PSC/RC)	ft	0	0	0	0	0	0	0	0	0
Notes:Abrasion throughout the entire floor in all barrels. - 7/31/2019										
8401/3:Wings	each	4	25	1	50	2	25	1	0	0
1080/3:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes:SE wing has a 1x1 spall with exposed rebar. - 7/31/2019										
1130/3:Cracking (RC and Other)	each	2	0	0	50	1	50	1	0	0
Notes:SW wing has CS3 crack with efflorescence. SE wing has CS2 cracks. - 7/31/2019										

Remarks: 12/6/2005 - Moderate to major efflorescence on barrel roof in all three barrels. East parapet heavy delamination above all three barrels. West parapet moderate delamination above barrels 2 and 3. Erosion se wingwall - 7/31/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 26-106-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	McIntosh	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	13 WEST OF DANZIG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 08' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 45' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	441828.9 5109780.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	M 13.5 (H 15) (live load for which structure was designated)
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 24 44 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	N Not Applicable	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1952 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	N Not applicable (NBI)
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	40 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	N N 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 29, 2019
32 Approach Roadway Width	28 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	10 Ft.	218 Channel Profile	N
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	213 Federal Aid Project Number	CS-195(2)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Wegner, Carlson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
TRIPLE, 10X5X30' RCB			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 26-106-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	89	64	57	18	16	18	16	0	0
Notes:There is honeycomb on the ceiling of barrel 3 from when the box culvert was poured. - 7/29/2019										
1120/3:Efflorescence/Rust Staining	ft	16	0	0	0	0	100	16	0	0
Notes:Barrel 1 has 5 feet, Barrel 2 has 7 feet, Barrel 3 has 4 feet all in CS 3 - 7/29/2019										
1130/3:Cracking (RC and Other)	ft	14	0	0	100	14	0	0	0	0
Notes:Barrel 1 has 7 feet and Barrel 3 has 7 feet of CS 2 - 7/29/2019										
6000/3:Scour	ft	2	0	0	100	2	0	0	0	0
Notes:There is minor scour on the east end and Moderate scour on the west end. - 7/29/2019										
8401/3:Wings	each	4	0	0	75	3	25	1	0	0
1080/3:Delamination/Spall/Patched Area	each	3	0	0	100	3	0	0	0	0
Notes:The Northeast, Southeast, and Southwest wings each have 1 SF of CS 2 spall - 7/29/2019										
1130/3:Cracking (RC and Other)	each	1	0	0	0	0	100	1	0	0
Notes:The Southwest wing has a CS 3 crack. - 7/29/2019										

Remarks: The East parapet has 1 SF of CS 2 Spall. - 7/29/2019**Alert Code 1:** Minor cracking of structure. - 7/29/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 26-106-11.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	McIntosh	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	13 WEST OF DANZIG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 08' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 45' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	441828.1 5109734.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1952 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	July 29, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Wegner, Carlson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10X7X36' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 26-106-11.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	108	6	6	92	99	3	3	0	0
1080/3:Delamination/Spall/Patched Area	ft	8	0	0	100	8	0	0	0	0
Notes:2 feet of CS2 spall on east end of barrel 1 at waterline. 3x3 ft CS2 spall on wall between barrels 2 and 3. 1 foot of spall on east end of barrel 3 at waterline and 2 .5x.5 spalls on east end. - 7/29/2019										
1090/3:Exposed Rebar	ft	2	0	0	0	0	100	2	0	0
Notes:2 feet of exposed rebar with section loss in barrel 1 at east end. - 7/29/2019										
1120/3:Efflorescence/Rust Staining	ft	37	0	0	100	37	0	0	0	0
Notes:There is 10 feet of efflorescence on the west end of barrel 1 and 6 feet on the East end. There is 5 feet and 2 feet on the east end of barrel 3 and 14 feet on the west end. - 7/29/2019										
1130/3:Cracking (RC and Other)	ft	85	71	60	28	24	1	1	0	0
Notes:There is a CS 1 crack the entire length of barrel 1 on the ceiling. There is a 10 foot CS 2 crack on the east end and a 14 foot CS 2 crack on the west end of barrel 3. There is also a CS 1 crack the entire length of barrel 3 on the ceiling. There is a CS 3 crack in the East parapet over barrel 3. - 7/29/2019										
1190/3:Abrasion(PSC/RC)	ft	30	0	0	100	30	0	0	0	0
Notes:There is abrasion at the water line in barrel 2 along both walls that are between barrels 1 and 2, and between 2 and 3 - 7/29/2019										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1080/3:Delamination/Spall/Patched Area	each	3	0	0	100	3	0	0	0	0
Notes:There is a 3 foot spall on the southwest wing. There is a 1x1 spall on the northeast and northwest wings. - 7/29/2019										
1130/3:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:CS 2 crack with efflorescence on Southwest wing. - 7/29/2019										

Remarks: 2-10 ft x 1 ft spalls on west parapet. 7 feet of spall on east parapet - 7/29/2019**Alert Code 1:** Barrel 2 has small amount of rip rap in west end and barrel 3 has 10ftx10ftx1ft in west end. There is a 3 foot deep scour hole on the East end of barrel 1. - 7/29/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 26-107-10.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	72.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	McIntosh	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02610 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	13 WEST OF DANZIG	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	4.199	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 08' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 44' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	442199.6 5110296.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 28 50 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 12 23 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1961 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	55 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	July 29, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.3 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	44.95 Ft.	218 Channel Profile	1 48 07/23/2019
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	24.6 Ft.	213 Federal Aid Project Number	CS-849(3)
52 Deck Width	28.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Wegner, Carlson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 26-107-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
15/1:Pre Concrete Top Flange	sq.ft	1,215	100	1,215	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	404	100	404	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	56	95	53	4	2	2	1	0	0
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	0	0	100	1	0	0
Notes:1x1 spall in the middle of the West abutment - 7/29/2019										
1130/3:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
Notes:2 CS 2 cracks in East abutment - 7/29/2019										
330/1:Metal Bridge Railing	ft	89	100	89	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	50	50	50	50	0	0
3430/1:Ox Flm/Txt Adhr(Stl Prot Coat)	sq.ft	50	0	0	0	0	100	50	0	0
Notes:approximately 50% of the protective coating has no top coat. - 7/29/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	50	0	0	100	50	0	0	0	0
Notes:approximately 50% of the protective coating has primer showing, but there is no corrosion evident. - 7/29/2019										
331/1:Re Conc Bridge Railing	ft	89	94	84	6	5	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:1 foot of spall on the East end of the south railing with exposed rebar, and 1 foot of spall 15 feet from the west end of south railing. - 7/29/2019										
1090/1:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:1 foot of exposed rebar with no section loss on the east end of the south rail - 7/29/2019										
1130/1:Cracking (RC and Other)	ft	40	95	38	5	2	0	0	0	0
Notes:South rail: 13 CS 1 and 1 CS 2, North rail: 25 CS 1 and 1 CS 2 - 7/29/2019										
4000/1:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Both abutments show signs of movement as noted in remarks/critical findings. - 7/29/2019										
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
Notes:Both slopes have rip rap installed - 7/29/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: East abutment - NE 4", SE 3.5" West abutment - NW 4.5", SW 4.5" (Measurements taken from back face of abutment). Measurements of the movement at the abutments was checked on 7-29-2019 and they have not changed. - 7/29/2019

Alert Code 2: East and West abutment, lateral movement inwards. - 7/29/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 26-107-22.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	McIntosh	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02624 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST OF ZEELAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	4.299	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	45d 58' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 44' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	442157.2 5090959.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	55 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	July 31, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	39.40 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/07/2016
	0.0 Ft.	213 Federal Aid Project Number	BRC-2624(052)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Carlson, Wegner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 26-107-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
243/3:Other Culvert	ft	180	0	0	100	180	0	0	0	0
1010/3:Cracking	ft	178	0	0	100	178	0	0	0	0
Notes:Longitudinal map cracking on ceiling of all 3 barrels. - 7/31/2019										
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Barrel 1 has two .05x.05 spalls on ceiling. Barrel 2 has one .05x.05 spall on ceiling. Barrel 3 has 1x1 spall on ceiling. - 7/31/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
1080/3:Delamination/Spall/Patched Area	each	2	0	0	100	2	0	0	0	0
Notes:SW wing 1x1 spall. NE wing 1x1.5 spall. (see pic.) - 7/31/2019										

Remarks: Ice damage on north parapet. Grout between all barrels on the north side doesn't seal the joint. - 7/31/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 26-109-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	McIntosh	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 3 SOUTH WISHEK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 13' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 41' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	446747.0 5118411.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2008 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	August 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.6 Ft.	Underwater	N
48 Length of Max Span	17 Ft.	Other Special	N
49 Structure Length	35.10 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0026(008)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Carlson, Wegner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 15'X 7'X 58' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 26-109-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
243/1:Other Culvert	ft	116	0	0	100	116	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:1x1 spall w/ exposed rebar on west parapet. - 8/6/2019										
1090/1:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:1' of exposed rebar in spall on west parapet. - 8/6/2019										
1130/1:Cracking (RC and Other)	ft	114	0	0	100	114	0	0	0	0
Notes:Longitudinal map cracking CS2 the whole length of the ceiling. East parapet has CS2 cracks. - 8/6/2019										
8401/3:Wings	each	4	25	1	75	3	0	0	0	0
1090/3:Exposed Rebar	each	1	0	0	100	1	0	0	0	0
Notes:SE wing has 1 foot of exposed rebar. - 8/6/2019										
1130/3:Cracking (RC and Other)	each	3	33	1	67	2	0	0	0	0
Notes:SE wing has CS2 crack. SW wing has CS1 crack. NW wing has CS2 cracks. - 8/6/2019										

Remarks: Cracks at wingwalls all 4 corners. 2/2016 - Spall with exposed rebar an SE wing wall. Minor erosion behind NW wing. - 8/6/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 26-109-07.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	McIntosh	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 4 SOUTH WISHEK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 11' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 41' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	446747.7 5116486.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	44.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	08/17/2018
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0026(010)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Carlson, Wegner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
TRIPLE 14 X 7 X 60' PCRCB		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 26-109-07.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
243/1:Other Culvert	ft	180	88	159	7	13	4	8	0	0
1010/1:Cracking	ft	20	0	0	60	12	40	8	0	0
Notes:Barrel #2 has 6' of CS3 and 3' of CS2 cracking on wall and 1' of CS3 and 1' CS2 cracking on ceiling. Barrel #3 has 7' of CS2 cracking on wall and 1' of CS3 and 1' CS2 cracking on ceiling . - 8/6/2019										
1120/1:Efflorescence/Rust Staining	ft	1	0	0	100	1	0	0	0	0
Notes:Efflorescence on joint between barrels 1 and 2. - 8/6/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 8/2018 - Box to be replaced with a new box. - 8/6/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-103-43.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	77.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02705 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ONE-O-ONE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 3 NORTH SQUAW GAP	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.499	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 31' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 59' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	124158.2 5276402.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	R Posted for Non-Load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 20 36 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 12 22 Tons
Dk Protect	8 Unknown	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	212 Gravel/Dirt	209 Posted in "Tons"	29 Tons
Age and Service		Appraisal	
27 Yr Built	1942 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	50 30 Year of ADT 2018	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	0.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	24 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 06, 2018
32 Approach Roadway Width	17 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	18.7 Ft.	Other Special	N
48 Length of Max Span	21 Ft.	218 Channel Profile	1 48 04/25/2019
49 Structure Length	22.97 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/30/2017
51 Bridge Rdwy Width - Curb to Curb	19.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 27-103-43.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	463	0	0	100	463	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	207	0	0	100	207	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
111/1:Timber Open Girder	ft	92	0	0	100	92	0	0	0	0
206/1:Timber Column	each	14	0	0	100	14	0	0	0	0
216/1:Timber Abutment	ft	43	100	43	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	43	100	43	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	46	0	0	94	43	0	0	7	3
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor damage to northwest corner of west curb. Moderate rust on stringers. Minor accumulation of debris at inlet end, partially obstructing flow. Channel runs adjacent to north abutment. Moderate longitudinal split in first timber girder from west.Moderate split in first timber girder from east at north end. 11/2006: Paint peeled to base metal - rust evident - 90% of surface area. Some timber pile have splits. 11/2018: SE End marker down

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-104-39.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02738 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BENNIE PEER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH 3 WEST SQUAW GAP	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.800	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 34' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 59' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	125168.1 5281335.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 33 59 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 15 29 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	304 Asphalt	209 Posted in "Tons"	29 Tons
Age and Service		Appraisal	
27 Yr Built	1982 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	255 30 Year of ADT 2018	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	1 0 0 0
19 Bypass, Detour Length	25 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 06, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	29.9 Ft.	Other Special	N
48 Length of Max Span	48 Ft.	218 Channel Profile	1 48 04/25/2019
49 Structure Length	51.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-104-39.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,668	97	1,610	4	58	0	0	0	0
510/1:Wearing Surfaces	sq.ft	1,668	97	1,610	4	58	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	194	100	194	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	105	94	99	6	6	0	0	0	0
8398/1:Slope Protection	each	1	0	0	100	1	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Hairline vertical cracks in both jersey barriers. Random hairline cracks in all endwall diaphragms. 01/2013- Hairline Crack Down Center of Deck portion of T-beams throughout. 11/2016 - No guardrail. Jersey barrier un- protected. Both ends of bridge roadway settling and causing ramping unto bridge. No end markers.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-104-45.0

200 System Designation	2 – County On	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	48.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02705 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ONE-O-ONE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 2 WEST SQUAW GAP	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.999	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 30' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 58' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	125123.1 5272849.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 21 38 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 11 20 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	27 Gravel/Dirt	209 Posted in "Tons"	24 Tons
Age and Service		Appraisal	
27 Yr Built	1967 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	50 30 Year of ADT 2018	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	0.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	24 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 06, 2018
32 Approach Roadway Width	19 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	21.0 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 04/25/2019
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	11/25/2014
51 Bridge Rdwy Width - Curb to Curb	21.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 27-104-45.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	538	0	0	100	538	0	0	0	0
206/1:Timber Column	each	22	78	14	22	4	22	4	0	0
216/1:Timber Abutment	ft	43	81	35	19	8	0	0	0	0
235/1:Timber Pier Cap	ft	49	82	40	18	9	0	0	0	0
332/1:Timb Bridge Railing	ft	49	0	0	100	49	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: 12/2010 - Moderate erosion behind southwest wingwall. Both backwalls bowed in 3" at 1/3 point, bowed out 6" at top away from channel. 4th piling from west in north abutment has minor split. Center piling in NE wing has moderate split. The 2nd piling from the west in both abutments have moderate split. Moderate split in south piling cap. 12/2012 – Deck is dry

Alert Code 2: 12/2010 – TEN STRINGERS SHOW SIGNS OF DISTRESS01/2013 –Twelve stringer have failed, measured from West at 3.3, 3.8, 4.5, 5.2, 6.0, 9.0, 9.7, 10.5, 12, 14, 16.2 and 16.5.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-105-39.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02738 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH 2 WEST SQUAW GAP	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.100	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 34' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 57' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	127129.3 5281069.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	N N/A (NBI)
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 42 76 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 38 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	303 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1982 106 Yr Reconstructed -1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	255 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	1 0 1 1
19 Bypass, Detour Length	25 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 06, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	29.9 Ft.	Other Special	N
48 Length of Max Span	56 Ft.	218 Channel Profile	1 48 04/25/2019
49 Structure Length	60.04 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-105-39.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,916	100	1,916	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	1,916	97	1,866	3	50	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	223	100	223	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	121	98	118	3	3	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor erosion behind southeast wing, and northeast wing. Minor popouts on west abutment and southwest wing. Hairline vertical cracks in both jersey barriers. Minor vertical crack in north jersey barrier at east end. W-beam guardrail installed in 2005. 01/2013- Hairline Crack Down Center of Deck portion of T-beams throughout. 11/2016: No end markers. hairline cracks in T-beams at abutments.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-106-39.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02738 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BENNIE PEER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH 1 WEST SQUAW GAP	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.999	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 34' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 56' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	128580.9 5280913.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 43 78 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 37 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	304 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1982 106 Yr Reconstructed -1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	255 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	1 0 1 1
19 Bypass, Detour Length	25 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 06, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	29.9 Ft.	Other Special	N
48 Length of Max Span	64 Ft.	218 Channel Profile	1 48 04/25/2019
49 Structure Length	67.91 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-106-39.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,174	100	2,174	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	2,174	98	2,124	2	50	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	384	100	384	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	97	64	3	2	0	0	0	0
331/1:Re Conc Bridge Railing	ft	135	100	135	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Hairline vertical cracks on jersey barriers. W-beam guardrail installed 2005. Minor honeycomb in face of west abutment. Minor spalls at joints in jersey barrier. 11/2016: Cracking and potholes in asphalt overlay on concrete deck. Vertical cracking in middle of E abutment. No end markers.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-111-41.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02738 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BENNIE PEER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 4 EAST SQUAW GAP	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.798	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 32' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 49' 60.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	136353.2 5277211.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 30 55 Tons
208 Dk Overburden	201 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	50 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	160 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	50 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 06, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	76 Ft.	Other Special	N
49 Structure Length	78.08 Ft.	218 Channel Profile	1 48 04/25/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	27.9 Ft.	213 Federal Aid Project Number	BRO-27(3)
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Ishenower
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-111-41.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	761	100	761	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	59	97	57	3	2	0	0	0	0
331/1:Re Conc Bridge Railing	ft	157	100	157	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Hairline vertical cracks in both jersey barriers. Random hairline cracks in all end wall diaphragms. Minor spalls on edges of beams at joints on driving surface hairline vertical crack in face of east abutment
01/2013 - Hairline vertical crack in face of west abutment. 11/2014 - Three 6" x 6" spalls on bottom edge of girders. NW end marker missing. Nw jersey barrier has 6" x 6" spall. 11/2018: Small crack in NW wingwall

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-119-44.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	88.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02738 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRIDGER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	13 E 2 N OF SQUAW GAP	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	19.896	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 30' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 39' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	149838.1 5271894.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	5 Moderate Damage
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	36 Tons
27 Yr Built	1982 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	135 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	22 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	November 06, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, McFARLIN
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X8X96' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-119-44.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	194	88	170	12	24	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Channel turns sharply to south on outlet end. Twelve inches of silt in barrels. One and one half foot of silt at outlet of north barrel. One inch separation in n. Joint at bottom joint tight at top, typical both barrels. Channel runs through south barrel only. Minor settlement at joint in both barrels. Hairline vertical cracks in all barrel walls. Hairline random cracks in all wing walls. 11/2014 - Load limit signs are faded and hard to read. Tree debris caught on inlet side wings. 11/2016: Barrels settling at mid joint. Roof in both barrels is bowed. Water flowing between barrels at bottom of N joint through separation. 11/2018: 2 feet of sediment in the barrels. South barrel has a dam in it

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-119-56.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	76.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	EAGLE DRAW	102 Direction of Traffic	2 2-way traffic
09 Location	12 EAST OF TROTTERS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 19' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 39' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	147819.9 5252617.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 37 67 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 22 40 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	100 None	209 Posted in "Tons"	35 Tons
Age and Service		Appraisal	
27 Yr Built	1994 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	4 Tolerable
29 ADT	20 30 Year of ADT 2018	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	124 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 06, 2018
32 Approach Roadway Width	15 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.7 Ft.	Other Special	N
48 Length of Max Span	80 Ft.	218 Channel Profile	1 48 04/25/2019
49 Structure Length	83.01 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/30/2017
51 Bridge Rdwy Width - Curb to Curb	16.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, McFARLIN
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 27-119-56.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,496	100	1,496	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	246	0	0	100	246	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
206/1:Timber Column	each	16	0	0	100	16	0	0	0	0
216/1:Timber Abutment	ft	39	0	0	100	39	0	0	0	0
235/1:Timber Pier Cap	ft	39	0	0	100	39	0	0	0	0
332/1:Timb Bridge Railing	ft	167	0	0	100	167	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: 6 4x4 deck plank fasteners are broke at random places under deck. Deck planks have minor checks and splits. The deck and superstructure were replaced in 1994. Six deck panel connection pins pulled completely out of deck. Six deck panel connection pins bent over on deck surface.

Alert Code 2: 11/2014 - Erosion on east abutment exposed pile and bottom plank on abutment for half of structure.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-122-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TIMBER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 2 EAST ALEXANDER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 54' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 35' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	156343.5 5316123.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 52 94 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 38 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	204 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1984 106 Yr Reconstructed -1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	50 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	1 0 0 0
19 Bypass, Detour Length	8 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 06, 2018
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	46 Ft.	218 Channel Profile	1 48 05/31/2019
49 Structure Length	50.85 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, McFARLIN
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-122-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	367	100	367	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	102	100	102	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor scour at inlet end of structure. Hairline cracks and minor spalls in all four end wall diaphragms. 12/2012 - Minor seepage between 1st and 2nd T beams from the south. Damage to SW corner of Jersey barrier 11/2018: Water seeping between 1st and 2nd T beams from the North

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-122-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TIMBER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 N 3 E ALEXANDER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 53' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 35' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	157463.6 5315183.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 47 86 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 47 Tons
208 Dk Overburden	201 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2000 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	November 06, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	51.84 Ft.	218 Channel Profile	1 48 05/31/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	BRO-27(026)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, McFARLIN
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 27-122-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	400	87	346	10	40	4	14	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	105	100	105	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor concrete deterioration on bottom of 2nd t-beam from east at south end, one quarter inch section loss. Moderate spall in end wall diaphragm at east end of south abutment. 12/2010 - Minor cracks in top of all end wall diaphragms. 12/2012 - Railing anchor bolt inspection 2012. Minor horizontal cracking in NE and NW wingwalls. 01/2017: Far west web of third T-beam from east is not resting on abutment; 1.5" gap between beam and beam seat 11/2018: Can see T beam resting on the rubber bearing in abutment.

Alert Code 2: Moderate concrete deterioration and honeycomb on bottom of 3rd t-beam from east for entire length, one quarter inch to one half inch section loss. Prestress system not exposed.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-122-42.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02738 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BOWLINE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9N 17W OF GRASSY BUTTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	23.295	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 32' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 36' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	153669.9 5275290.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 38 69 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 35 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1984 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	135 30 Year of ADT 2018	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	1 0 0 0
19 Bypass, Detour Length	20 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 08, 2018
32 Approach Roadway Width	25 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	48 Ft.	218 Channel Profile	1 48 04/24/2019
49 Structure Length	49.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, McFARLIN
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-122-42.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	384	98	378	2	6	0	0	0	0
215/1:Re Conc Abutment	ft	59	93	55	7	4	0	0	0	0
331/1:Re Conc Bridge Railing	ft	98	100	98	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Hairline diagonal cracks in all four end wall diaphragms. Minor spalls on bottom edges of t-beams at both ends. Minor vertical crack in east abutment face. 01/2013 - 2 minor vertical crack in east abutment face and 2 minor vertical crack in east abutment face. 11/2018 - 1st and 2nd T beam from the west has water seeping through.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-123-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TIMBER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 NORTH 4 EAST ALEXANDER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 58' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 33' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	159630.8 5323172.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 52 95 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 14 26 Tons
208 Dk Overburden	201 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	24 Tons
27 Yr Built	2002 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 06, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	64 Ft.	Other Special	N
49 Structure Length	67.91 Ft.	218 Channel Profile	1 48 05/31/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	BRO-27(029)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, McFARLIN
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 27-123-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	660	100	659	0	1	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	135	100	135	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor random crack in top of SW wingwall. Minor crack in endwall diaphragm at NW corner. End marker down at NW corner. Hairline crack in first beam from east at south end. 12/2012 - Railing anchor bolt inspection 2012. Minor spalling at SE and NW corners on beams, top edge. Major damage to guard rail end treatment SE corner 11/2016: Four posts in NE corner guard rail detached from rail.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 27-123-51.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Major Collector
04 City	RHOADES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02750 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE BEICEGEL CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	16W 2N GRASSY BUTTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.100	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Forest Highway (FH)
16 Latitude	47d 24' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 34' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	154538.5 5261281.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 47 Tons
208 Dk Overburden	201 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	120 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	92 Ft.	Other Special	N
49 Structure Length	94.16 Ft.	218 Channel Profile	1 48 04/30/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.5 Ft.	213 Federal Aid Project Number	BRO-27(8)
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, McFARLIN
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 27-123-51.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	919	0	0	100	919	0	0	0	0
215/2:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	187	100	187	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	0	0	100	2	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: County has diverted drainage from road ditch at ne and sw corners. Gabions have been installed at the base of the north and south abutment inslopes. Loose rock riprap has been placed on the abutment inslopes above the gabions. The gabions will have to be inspected during periods of high water to determine their stabilizing effect. Moderate erosion behind wingwalls at all 4 corners. Minor spalls on edges of beams at joints on driving surface. Hairline vertical cracks in jersey barriers. Random minor cracks and spalls in all endwall diaphragms and top of all wingwalls. 12/2010 - severe deterioration to downstream ends of north & south gabions. Severe loss of riprap on north abutment inslope. Severe erosion at west end of north abutment, 3' of one piling exposed. 12/2012 – Minor Hairline cracks in abutments. 11/2014 - Slope protection has been repaired and square concrete blanket has been placed on lower half of channel. Rip-rap has been placed on inslope, no pile are exposed. 11/2016: Slope protection is showing deterioration. NE corner shows more deterioration than other areas and may become damaged when water is flowing through the channel.

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North Dakota Department of Transportation

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Structure Number: 27-124-11.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Major Collector
04 City	POE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02729 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TIMBER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	11 NORTH 1 WEST RAWSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	26.794	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 58' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 33' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	160374.9 5323954.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Stringer/Multi-beam or Girder		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 41 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2015 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	November 06, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	36.0 Ft.	Underwater	N
48 Length of Max Span	102 Ft.	Other Special	N
49 Structure Length	102.00 Ft.	218 Channel Profile	1 48 05/12/2017
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/05/2015
	36.0 Ft.	213 Federal Aid Project Number	COIB-2729(001)
52 Deck Width	38.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, McFARLIN
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-124-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	3,927	100	3,927	0	0	0	0	0	0
Notes: _										
109/2:Pre Opn Conc Girder/Beam	ft	510	100	510	0	0	0	0	0	0
Notes: _										
215/1:Re Conc Abutment	ft	74	100	74	0	0	0	0	0	0
313/1:Fixed Bearing	each	10	100	10	0	0	0	0	0	0
Notes: _										
321/3:Re Conc Approach Slab	sq.ft	2,002	100	2,002	0	0	0	0	0	0
Notes: _										
331/1:Re Conc Bridge Railing	ft	204	100	204	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: New structure in 2015. Small amount of cracking and efflorescence on underside of deck. 11/2018: Small Spall 2" x 2" on south side west end outside of the beam.

Structure Number: 27-124-50.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Major Collector
04 City	RHOADES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02750 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEICEGEL CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	15 EAST FLAT ROCK BUTTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.500	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 25' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 32' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	156998.6 5262566.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 39 71 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	100 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	120 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	November 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	46 Ft.	Other Special	N
49 Structure Length	142.06 Ft.	218 Channel Profile	1 48 04/30/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, McFARLIN
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 27-124-50.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	1,073	0	0	100	1,072	0	1	0	0
210/1:Re Conc Pier Wall	ft	59	100	59	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	285	100	285	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor spalling of edges of beams and grout in joints on driving surface. County has diverted ditch drain- age away from structure at all four corners. Random hair- line cracks in endwall diaphragms on both abutments. Hair- line vertical cracks in jersey barriers at joints. 12/2010 - Moderate diagonal crack in east end of 1st t-beam from north at beam seat. 12/2012 – Rebar staining on bottom of bridge.

Alert Code 1: Erosion hole 30ft x 6ft x 20ft deep, 20ft north of east abut. minor erosion at sw,ne and se corners of structure at shoulder.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-125-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Local
04 City	PATENT GATE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TIMBER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 1 EAST RAWSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 51' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 31' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	161963.4 5310135.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 47 84 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 40 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	Tons
Age and Service		Appraisal	
27 Yr Built	1989 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	20 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	1 0 0 0
19 Bypass, Detour Length	8 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 07, 2018
32 Approach Roadway Width	28 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	40 Ft.	218 Channel Profile	1 48 04/23/2019
49 Structure Length	42.98 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	11/25/2014
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, McFARLIN
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 27-125-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	322	100	322	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	59	90	53	10	6	0	0	0	0
331/1:Re Conc Bridge Railing	ft	85	97	82	4	3	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Moderate spalls in east end wall diaphragm on north abutment. Minor spalls in west end wall diaphragm on north abutment. Minor damage to north end of west jersey barrier. Minor spall in top of west jersey barrier at center. Hair- line vertical cracks in both jersey barriers. Minor scour under structure. Minor cracks and spalls in top of ne wing. Minor random cracks in east end of north and south abutment face. 11/2018: Hairline cracking on underside cente of t-beams.

Alert Code 2: 01/2017: Moderate crack in west end of south abutment face. Crack is wider at the top than at the bottom. Showing separation.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-126-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	58.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Local
04 City	RENNVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TIMBER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 2 EAST RAWSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 50' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 30' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	162711.3 5309289.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 25 45 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 15 28 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	204 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1962 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	12 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	February 12, 2019
32 Approach Roadway Width	19 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	21.3 Ft.	Other Special	N
48 Length of Max Span	21 Ft.	218 Channel Profile	1 48 05/29/2019
49 Structure Length	22.97 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	11/25/2014
51 Bridge Rdwy Width - Curb to Curb	21.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Peebles
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 27-126-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	517	0	0	0	0	92	475	8	42
206/1:Timber Column	each	18	0	0	100	18	0	0	0	0
216/1:Timber Abutment	ft	43	0	0	100	43	0	0	0	0
235/1:Timber Pier Cap	ft	49	0	0	94	46	6	3	0	0
332/1:Timb Bridge Railing	ft	46	0	0	100	46	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor scour under structure. Minor split for full length of west pile cap. Two timber stringers have failed. 12/2012 – Four timber stringer have failed at 9.7', 12.80', 13.05', and 16.3' from south edge. 11/2014 - NW & SE end markers missing.

Alert Code 1: Minor erosion at sw corner of west abutemnt.

Alert Code 2: 11/2014 - There are 12 stringers broke. Most of them at wheel paths. 2/2019- one stringer is hanging down 6 inches

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-126-36.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Major Collector
04 City	RED WING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02727 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RED WING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	15S & 6E OF ALEXANDER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.100	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 37' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 31' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	160180.1 5283668.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 38 69 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	303 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	35 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	160 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	13 Miles	36 Traffic Safety Features	1 0 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	November 06, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	44 Ft.	Other Special	N
49 Structure Length	48.88 Ft.	218 Channel Profile	1 48 05/01/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, McFARLIN
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-126-36.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,572	100	1,572	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	1,572	100	1,572	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	351	100	351	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	98	92	90	8	8	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Random hairline cracks in all four end wall diaphragms. Hairline vertical cracks in jersey barriers. Minor spalls in jersey barriers at guardrail connection location. 11/2014 - NW & NE end markers missing. 11/2016: All end markers down except SE corner. Minor spall 6" x 3" in beam seat approximately 8' north of south side of W abutment.

Structure Number: 27-131-30.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02730 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4S 2W OF WATFORD CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	11.697	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 42' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 23' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	170472.4 5292695.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	160 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	37.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	16 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	February 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	53.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/17/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	SC2730(061)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, Peebles
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
QUAD 12 X 8 X 64' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-131-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	256	100	256	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	1	100	1	0	0	0	0	0	0

Remarks: 2/2019 - west barrel west side 2nd section in has a crack on the seam approximately 1 foot long. Efflorescence on 2nd and 3rd section from the south of the east 2 barrels.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-132-29.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02730 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CHERRY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6S 4W OF WATFORD CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.398	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 22' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	172387.3 5294907.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	160 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	16 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	February 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	38.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/17/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	SC-2730(061)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, Peebles
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
TRIPLE 12 X 11 X 64' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-132-29.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	192	100	192	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 2/2019-4'x1' spall on NW corner with rebar showing and 1'x1' spall on SW corner. Hairline cracking on wall/ceiling corner at North edge of North barrel

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-134-27.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02730 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CHERRY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4S 2W OF WATFORD CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	11.697	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 44' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 19' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	175325.3 5297338.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	160 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	37.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	16 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	February 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	13 Ft.	Other Special	N
49 Structure Length	41.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/17/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	SC-2730(061)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, Peebles
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
TRIPLE 12 X 11 X 64' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-134-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	192	96	185	4	7	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: REPLACED WITH NEW BOX CULVERT IN 2016. 3/1/2018 - Minor spalling at lift holes. Spalls on ceiling last segment on south end east barrel patched well. East barrel north end spalling. North end joint sections have patch but looks sound.

Structure Number: 27-136-27.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02730 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4S 2W OF WATFORD CITY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	11.697	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 44' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 18' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	177588.2 5297130.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	160 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	37.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	16 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	February 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	37.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/17/2017
	0.0 Ft.	213 Federal Aid Project Number	SC-2739(061)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Peebles
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
TRIPLE 11 X 8 X 110' RCB			

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-136-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	330	100	330	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/2018: Erosion on W side by wing wall

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-137-55.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	60.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEICEGAL CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2S 2W GRASSY BUTTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 21' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 17' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	176480.0 5253553.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 16 29 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 11 21 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	21 Tons
Age and Service		Appraisal	
27 Yr Built	1970 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2018	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	124 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 07, 2018
32 Approach Roadway Width	13 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	18.7 Ft.	Other Special	N
48 Length of Max Span	18 Ft.	218 Channel Profile	1 48 05/01/2019
49 Structure Length	55.12 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	19.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, McFARLIN
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 27-137-55.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,109	0	0	100	1,109	0	0	0	0
111/1:Timber Open Girder	ft	771	5	36	95	735	0	0	0	0
206/1:Timber Column	each	28	0	0	100	28	0	0	0	0
216/1:Timber Abutment	ft	43	0	0	100	43	0	0	0	0
235/1:Timber Pier Cap	ft	89	0	0	100	89	0	0	0	0
332/1:Timb Bridge Railing	ft	112	0	0	80	90	0	0	20	22
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: The 2nd, 3rd, and 4th beams from south in west span have full length minor longitudinal cracks. 12/2010 - MINOR PIECES OF TIMBER BEAM SEATS SPLIT OFF OVER PIER PILE CAPS. 11/2018- East Pier Cap rotated toward abutment 1 inch.

Alert Code 1: The center section of south curb broken away. The first beam from south in center span has moderate longitudinal crack for entire length. Minor splits and checks in all timber members. Moderate collection of debris on south side of west pier. The first stringer from south in the west span is cracked entire length.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 27-145-52.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	McKenzie	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CHARLIE BOB CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7E 1N OF GRASSY BUTTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 23' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 06' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	190044.0 5257105.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 38 68 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	36 Tons
27 Yr Built	1985 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	24 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	November 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	40 Ft.	Other Special	N
49 Structure Length	42.98 Ft.	218 Channel Profile	1 48 05/01/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	27.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, McFARLIN
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 27-145-52.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	322	100	321	0	1	0	0	0	0
215/1:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	85	100	85	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
331/1:Re Conc Bridge Railing	ft	85	100	85	0	0	0	0	0	0
8398/1:Slope Protection	each	1	0	0	100	1	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor popouts on all four wingwalls. Minor popout on outside of first t-beam from south at west end. Minor spalls at drains on both concrete curbs. 11/2016: Two spalls on east end of both curbs. Top of T-beams have minor spalling. 11/2018: East bound load posting down.

Alert Code 1: Minor scour under structure.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-109-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	74.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	LOQUEMONT TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 3 SOUTH RAUB	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	lian Reservation Road (IRR)
16 Latitude	47d 42' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 06' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	266865.0 5288221.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 23 41 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 13 25 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1930 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 16, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.0 Ft.	Other Special	N
48 Length of Max Span	15 Ft.	218 Channel Profile	1 48 06/21/2017
49 Structure Length	33.14 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.3 Ft Lt-Side	212 Structure Load Rated	01/30/2017
51 Bridge Rdwy Width - Curb to Curb	22.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-109-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	732	0	0	100	732	0	0	0	0
1150/1:Check/Shake	sq.ft	732	0	0	100	732	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	299	0	0	100	299	0	0	0	0
1000/1:Corrosion	ft	299	0	0	100	299	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3410/1:Chalk(Steel Protect Coatings)	sq.ft	100	0	0	0	0	100	100	0	0
210/1:Re Conc Pier Wall	ft	23	0	0	91	21	9	2	0	0
1130/1:Cracking (RC and Other)	ft	23	0	0	91	21	9	2	0	0
Notes:CONSTRUCTION JOINT BETWEEN BASE OF PIER (WEST END) AND SPILLWAY HAS MODERATE DETERIORATION. - 5/16/2019										
215/1:Re Conc Abutment	ft	49	0	0	90	44	10	5	0	0
1130/1:Cracking (RC and Other)	ft	49	0	0	90	44	10	5	0	0
Notes:4-6 MM VERTICAL CRACK IN S ABUTMENT BETWEEN GIRDERS 2 & 3 (FROM WEST). 0.60 MM CRACK NEAR BASE OF SPILLWAY IN BOTH SPANS. 4 mm cracks in north abutment & pier 2. Moderate map cracking on abutments & pier wall. - 5/16/2019										
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
Notes:EROSION UNDER BRACE WALL FOR SW WING OUTER END OF BRACE WALL BROKEN OFF. - 5/16/2019										
1130/1:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:TWO LARGE CRACKS IN SE WINGWALL. - 5/16/2019										

Remarks: MINOR UNDERCUTTING OF SPILLWAY ON WEST SIDE. Bridge rails are missing. End markers are down. Load limit signs are down, but it's a unrestricted bridge. - 5/16/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-111-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	LOQUEMONT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DEEP WATER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 SOUTH RAUB	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Indian Reservation Road (IRR)
16 Latitude	47d 44' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 03' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	270238.0 5292015.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 12 22 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	May 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	5.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	60 Ft.	Other Special	N
49 Structure Length	63.98 Ft.	218 Channel Profile	1 48 06/21/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.5 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.8 Ft.	213 Federal Aid Project Number	SOS-28(3)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Medler, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-111-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	619	3	19	32	200	65	400	0	0
1130/1:Cracking (RC and Other)	sq.ft	400	0	0	0	0	100	400	0	0
Notes:5-16-19: Map cracking at mid deck and S. end, 1-2 mm starting to show through bottom of the deck. - 5/16/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	200	0	0	100	200	0	0	0	0
Notes:Ends of deck being abraded by gravel from crossing traffic. - 5/16/2019										
104/1:Pre Clsd Box Girder	ft	256	100	256	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	128	92	118	8	10	0	0	0	0
1090/1:Exposed Rebar	ft	10	0	0	100	10	0	0	0	0
Notes:Both jersey barriers have 2"-8" long spalls developing over vertically placed rebar. Short sections of rebar exposed. - 5/16/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Runoff from deck now seeping through expansion material between abutment diaphragm and wing. All end markers missing. - 5/16/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-112-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	54.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	CREMERVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DEEP WATER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	NORTH SIDE OF RAUB	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Indian Reservation Road (IRR)
16 Latitude	47d 44' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 02' 37.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	271873.9 5292660.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 4 9 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	15 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	57 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 06/21/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Medler, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-112-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	840	0	0	100	840	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	840	0	0	100	840	0	0	0	0
Notes:Light abrasion throughout surface of bridge deck. - 5/16/2019										
104/1:Pre Clsd Box Girder	ft	240	100	240	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
Notes:Minor vertical hairline cracks run from top to bottom of both abutments. - 5/16/2019										
330/1:Metal Bridge Railing	ft	121	100	121	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	121	100	121	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
2210/1:Movement	each	1	0	0	100	1	0	0	0	0
Notes:North side has some displacement. - 5/16/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Expansion material, between wings and backwalls, is deteriorating. Minor erosion to channel bank NW of bridge.
End markers in place. - 5/16/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-112-09.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	CREMERVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1.5 SOUTH OF RAUB	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 44' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 02' 37.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	271782.2 5290339.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2015 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	0 Ft.	Other Special	N
49 Structure Length	22.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/28/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CNOA-2815(001)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Medler, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 10 X 10 X 87' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-112-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	174	99	173	1	1	0	0	0	0
Notes:Small spall on corner of SE barrel end. - 5/16/2019										
1090/3:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:Spall on roof between section 5 and 6 from the West in South barrel with exposed rebar. - 5/16/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-130-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect /	BRANCH DOUGLAS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 3 SOUTH OF EMMET	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 36' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 40' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	299275.4 5275974.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2012 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	April 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	35.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	29.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/08/2012
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0028(019)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Devries
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 14' X 14' X 77' PRCB		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-130-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	154	100	154	0	0	0	0	0	0
Notes:Hairline cracks in north barrel with efflorescence. - 4/9/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-135-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DOUGLAS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 4 NORTH GARRISON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 42' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 33' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	308016.9 5286461.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 27 50 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 30 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	24 Gravel/Dirt	209 Posted in "Tons"	15 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	40 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	7 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 10, 2019
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.2 Ft.	Other Special	N
48 Length of Max Span	31 Ft.	218 Channel Profile	1 48 06/21/2017
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/25/2017
51 Bridge Rdwy Width - Curb to Curb	27.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 28-135-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	308	45	138	45	138	10	32	0	0
1090/1:Exposed Rebar	ft	32	0	0	0	0	100	32	0	0
Notes:Beams 2,8, and 9 have exposed rebar. Spalls found along bottom of beams 1,2,3,8,and 9. - 4/10/2019										
1130/1:Cracking (RC and Other)	ft	138	0	0	100	138	0	0	0	0
Notes:Beam 5 has longitudinal crack full length. - 4/10/2019										
206/1:Timber Column	each	14	0	0	100	14	0	0	0	0
1150/1:Check/Shake	each	14	0	0	100	14	0	0	0	0
216/1:Timber Abutment	ft	59	0	0	100	59	0	0	0	0
Notes:Minor shifting of back planks in west abutment. Bottom, horizontal brace plank is rupturing next to north piling in both abutments. - 4/10/2019										
1150/1:Check/Shake	ft	59	0	0	100	59	0	0	0	0
Notes:Bottom, horizontal brace plank is rupturing next to north piling in both abutments. - 4/10/2019										
235/1:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	62	100	62	0	0	0	0	0	0
Notes:2nd timber post for W-beam from East on N. guardrail is broke away. - 4/10/2019										
331/1:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Approach embankment has minor to moderate erosion, back of outer third of wingwalls. Narrow, deep vertical washout in inslope of SE approach at end of approach rail. - 4/10/2019 West Load limit sign gone - 4/10/2019 - does not need to be posted 7-01-19 nmh

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-135-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	52.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MID. BR. DOUGLAS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 2 NORTH GARRISON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 40' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 32' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	308619.6 5283215.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 8 16 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 5 10 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	15 Tons
Age and Service		Appraisal	
27 Yr Built	1938 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	4 Tolerable
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 10, 2019
32 Approach Roadway Width	21 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	21.0 Ft.	Other Special	N
48 Length of Max Span	27 Ft.	218 Channel Profile	1 48 06/21/2017
49 Structure Length	26.90 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/30/2017
51 Bridge Rdwy Width - Curb to Curb	21.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 28-135-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	570	0	0	100	570	0	0	0	0
1180/2:Abrasion	sq.ft	570	0	0	100	570	0	0	0	0
Notes:DECK PLANKS ARE MINOR TO MODERATELY WORN. - 4/10/2019										
107/1:Steel Opn Girder/Beam	ft	269	0	0	100	269	0	0	0	0
Notes:A TRANSVERSE I-BEAM DIAPHRAGM HAS BEEN WELDED TO STEEL GIRDERS, AT MID-SPAN, TO PREVENT BOWING OF LONGITUDINAL MEMBERS. - 4/10/2019										
1000/1:Corrosion	ft	269	0	0	100	269	0	0	0	0
Notes:H-BEAM PILING AND I-BEAM STRINGERS ARE SURFACE RUSTED. - 4/10/2019										
202/1:Steel Column	each	10	0	0	100	10	0	0	0	0
1000/1:Corrosion	each	10	0	0	100	10	0	0	0	0
206/1:Timber Column	each	4	0	0	100	4	0	0	0	0
1150/1:Check/Shake	each	4	0	0	100	4	0	0	0	0
216/1:Timber Abutment	ft	43	0	0	100	43	0	0	0	0
Notes:1 -2" GAP BETWEEN TOP, TWO HORIZONTAL ABUTMENT PLANKS; SOME EROSION OCCURRING. - 4/10/2019										
1150/1:Check/Shake	ft	43	0	0	100	43	0	0	0	0
231/1:Steel Pier Cap	ft	43	0	0	100	43	0	0	0	0
1000/1:Corrosion	ft	43	0	0	100	43	0	0	0	0
330/1:Metal Bridge Railing	ft	52	0	0	100	52	0	0	0	0
1000/1:Corrosion	ft	52	0	0	100	52	0	0	0	0
332/1:Timb Bridge Railing	ft	52	0	0	100	52	0	0	0	0
1150/1:Check/Shake	ft	52	0	0	100	52	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1150/1:Check/Shake	each	4	0	0	100	4	0	0	0	0

Remarks: 4/2015 - 2' x 6" x 1' sinkhole behind east abutment in south wheel track. - 4/10/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-135-15.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	56.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	ST. MARY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MID. BR. DOUGLAS CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	6.3 WEST 1 SOUTH GARRISON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 37' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 33' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	308171.6 5278565.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	—	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 14 26 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 8 16 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	03 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	6 Equal Minimum
29 ADT	5 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 10, 2019
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	14.4 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 06/21/2017
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	01/31/2017
51 Bridge Rdwy Width - Curb to Curb	14.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 28-135-15.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	431	1	2	100	429	0	0	0	0
1150/1:Check/Shake	sq.ft	431	1	2	100	429	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	210	0	0	100	210	0	0	0	0
Notes:Steel girders are surface rusted; but no loss of section . North, outside girder bowed slightly to the south. A couple other girders near centerline have a minor twist and are bowed to the south. - 4/10/2019										
1000/1:Corrosion	ft	210	0	0	100	210	0	0	0	0
202/1:Steel Column	each	8	88	7	13	1	0	0	0	0
1900/1:Distortion	each	1	0	0	100	1	0	0	0	0
216/1:Timber Abutment	ft	33	0	0	100	33	0	0	0	0
Notes:East abutment piling starting to bow toward the channel. Diagonal bracing, on east abutment, are slightly twisted. NW diagonal brace on west abutment also slightly twisted. - 4/10/2019										
1150/1:Check/Shake	ft	33	0	0	100	33	0	0	0	0
231/1:Steel Pier Cap	ft	33	0	0	100	33	0	0	0	0
1000/1:Corrosion	ft	33	0	0	100	33	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1150/1:Check/Shake	each	4	0	0	100	4	0	0	0	0
Notes:Weathered timber - 4/10/2019										

Remarks: No bridge rails; 3" x 12" timbers mark the deck edge. Bent H-piles were cut off and straight sections spliced in. Settlement of approach embankments has exposed deck ends in wheel paths. There is a gap between abutment back planks and deck where approaches can sift through. - 4/10/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-136-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	64.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	DOUGLAS TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MID. BR. DOUGLAS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	14 EAST 1 NORTH ROSEGLEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 45' 40.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 32' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	309729.4 5292856.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 9 (H 10) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 26 48 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 16 29 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1936 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	April 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	21.3 Ft.	Underwater	N
48 Length of Max Span	16 Ft.	Other Special	N
49 Structure Length	33.14 Ft.	218 Channel Profile	1 48 06/21/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/31/2017
	21.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-136-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	710	0	0	100	710	0	0	0	0
Notes:TIMBER DECK MODERATELY WEATHERED. - 4/9/2019										
1150/1:Check/Shake	sq.ft	710	0	0	100	710	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	299	0	0	100	299	0	0	0	0
1000/1:Corrosion	ft	299	0	0	100	299	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co	sq.ft	1	0	0	100	1	0	0	0	0
Notes:I-BEAMS HAVE PEELING PAINT AND MINIMAL RUSTING. - 4/9/2019										
213/1:Masonry Pier Wall	ft	23	0	0	0	0	87	20	13	3
Notes:MINOR SETTLEMENT HAS CAUSED CRACK/SEPARATION IN GROUTED ROCK AT LOWER SOUTH END OF PIER. MODERATE DIAGONAL CRACK AT SOUTH END OF PIER.Base of pier wall on north end has 2' spalled and missing. - 4/9/2019										
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	0	0	0	0	100	3
1610/1:Mortar Breakdown (Masonry)	ft	20	0	0	0	0	100	20	0	0
217/1:Masonry Abutment	ft	49	0	0	100	49	0	0	0	0
1610/1:Mortar Breakdown (Masonry)	ft	49	0	0	100	49	0	0	0	0
234/1:Re Conc Pier Cap	ft	23	100	23	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	66	50	33	12	8	0	0	38	25
Notes:4/2015 - 3/4 of south rail missing. - 4/9/2019										
1150/1:Check/Shake	ft	8	0	0	100	8	0	0	0	0
7000/1:Damage	ft	25	0	0	0	0	0	0	100	25
8401/1:Wings	each	4	100	4	0	0	0	0	0	0
Notes:VERTICAL, HAIRLINE CRACK FULL HEIGHT OF SE WINGWALL. - 4/9/2019										

Remarks: LARGE SECTIONS OF SPILLWAY BROKE LOOSE FROM MAIN SPILLWAY APPROX. 2-4 FT. IN FROM SOUTH END. SOME UNDER-MINING AT THIS LOCATION. GROUT IN SPILLWAYS MODERATE TO SEVERLY DETERIORATED. EMBEDDED ROCK LAYS LOOSE OR HAS MINIMAL CONTACT WITH GROUT. END MARKERS ARE UP. - 4/9/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-137-11.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02841 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DOUGLAS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	15 E 4 S OF ROSEGLEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	4.399	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 30' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	311845.7 5285315.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	6 Corrugated Steel	64 Oper. Rating	49 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	29 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	212 Gravel/Dirt	209 Posted in "Tons"	18 Tons
Age and Service		Appraisal	
27 Yr Built	1936 106 Yr Reconstructed	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	100 30 Year of ADT	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	13.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 09, 2019
32 Approach Roadway Width	27 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	13 Ft.	218 Channel Profile	1 48 06/21/2017
49 Structure Length	34.12 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/31/2017
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 28-137-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
30/1:Steel Deck - Orthotropic	sq.ft	947	0	0	100	947	0	0	0	0
1000/1:Corrosion	sq.ft	947	0	0	100	947	0	0	0	0
510/1:Wearing Surfaces	sq.ft	947	0	0	100	947	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	374	0	0	100	374	0	0	0	0
1000/1:Corrosion	ft	374	0	0	100	374	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
210/1:Re Conc Pier Wall	ft	30	0	0	100	30	0	0	0	0
1130/1:Cracking (RC and Other)	ft	30	0	0	100	30	0	0	0	0
215/1:Re Conc Abutment	ft	59	0	0	100	59	0	0	0	0
1130/1:Cracking (RC and Other)	ft	59	0	0	100	59	0	0	0	0
Notes:There is a vertical crack under third girder from west in Span one. There is a vertical crack under fifth girder from west in Span two, 1/8" to 1/4" wide. - 4/9/2019										
330/1:Metal Bridge Railing	ft	69	100	69	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1130/1:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:Large vertical crack in SE & SW wingwalls.At the SE wing there is a vertical crack at full length x .5" wide , and SW Wing has a crack full length x 3/8" wide. - 4/9/2019										

Remarks: Horizontal crack one eight inch wide in spillway of Span one. All concrete surfaces are covered with random hairline cracks. Moderate degrading of channel embankment on downstream side of structure. Bridge has spillway built in. 4"+ wide spall at bottom of SW wing where it ties to floor. Reinforcing mesh exposed. Concrete surface of spillway system, moderate to major deteriorated. 1"-2" layers of concrete flaking away. 2-3 ft deep scour hole off east end of spillway. Spillway is undercut .0.5 -1.0 foot. Year 2017: Each spillway has a 2' x 3' spall in the vertical face. 4-9-19: 4' x 6' spall on spillway floor at SW wing. - 4/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-143-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	80.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 SOUTH RIVERDALE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 24' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 22' 60.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	320177.0 5252768.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	47 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	29 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	26 Gravel/Dirt	209 Posted in "Tons"	15 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 08, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	30.2 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 07/11/2017
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	08/25/2017
51 Bridge Rdwy Width - Curb to Curb	30.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	31.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 28-143-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	308	88	272	12	36	0	0	0	0
1090/1:Exposed Rebar	ft	36	0	0	100	36	0	0	0	0
Notes:Small honeycomb areas on bottom of girder portion of concrete channel beams. Transverse spalls developing on bottom of girders with short sections of rebar exposed. - 4/8/2019										
206/1:Timber Column	each	14	0	0	100	14	0	0	0	0
1150/1:Check/Shake	each	14	0	0	100	14	0	0	0	0
Notes:Center piling in abutment 1 has 8' long weather check starting at top of member. - 4/8/2019										
216/1:Timber Abutment	ft	66	0	0	100	66	0	0	0	0
1900/1:Distortion	ft	66	0	0	100	66	0	0	0	0
Notes:West end of south abutment leaning back 0.5 ft. - 4/8/2019										
235/1:Timber Pier Cap	ft	69	0	0	100	69	0	0	0	0
1150/1:Check/Shake	ft	69	0	0	100	69	0	0	0	0
330/1:Metal Bridge Railing	ft	62	100	62	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	62	92	57	5	3	3	2	0	0
1130/1:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
Notes:Some of concrete bridge rail posts have well defined random cracks. - 4/8/2019										
7000/1:Damage	ft	2	0	0	0	0	100	2	0	0
Notes:4-8-19: Impact damage on two of the West railing posts. - 4/8/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1900/1:Distortion	each	4	0	0	100	4	0	0	0	0
Notes:SW wing moderately twisted. - 4/8/2019										

Remarks: Wingwalls attach to structure 1-2 feet in from outer corners of bridge deck. Void found back of north abutment when planks were sounded. End marker missing in SE corner. - 4/8/2019

Alert Code 1: West end of North abutment leaning back 1.0 Ft., east end leaning 1.3 Ft.. - 4/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-145-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	64.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 5 SOUTH RIVERDALE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 24' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 20' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	323908.7 5254060.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	47 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	29 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	26 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1966 106 Yr Reconstructed	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	50 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 08, 2019
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	30.2 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 07/11/2017
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/25/2017
51 Bridge Rdwy Width - Curb to Curb	30.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	31.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 28-145-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	308	100	308	0	0	0	0	0	0
206/1:Timber Column	each	14	0	0	0	0	100	14	0	0
1900/1:Distortion	each	14	0	0	0	0	100	14	0	0
216/1:Timber Abutment	ft	66	0	0	0	0	100	66	0	0
1900/1:Distortion	ft	66	0	0	0	0	100	66	0	0
Notes:Piling for south abutment bowed inward 4-5" from weight of approach embankment. NE corner of north abutment tipped back 4-5". - 4/8/2019										
235/1:Timber Pier Cap	ft	69	0	0	97	67	3	2	0	0
1900/1:Distortion	ft	67	0	0	100	67	0	0	0	0
7000/1:Damage	ft	2	0	0	0	0	100	2	0	0
Notes:Bottom of timber cap, for Abutment two, by second piling from west, has approx. 1.5 ft. X 2 in. section broken out. - 4/8/2019										
330/1:Metal Bridge Railing	ft	62	100	62	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	62	92	57	8	5	0	0	0	0
Notes:Moderate hairline cracks in railing posts for west bridge rail. - 4/8/2019										
8401/1:Wings	each	4	0	0	75	3	25	1	0	0
1900/1:Distortion	each	4	0	0	75	3	25	1	0	0
Notes:SW wing moderately twisted. All other wings have minor twisting. - 4/8/2019										

Alert Code 1: Piles 2, 4, 5, and 6 (from west south abutment) are moderately ruptured near the ground level. - 4/8/2019**Alert Code 2:** Pile 3 (from west south abutment) is broken approx. 1 Ft. above ground level. - 4/8/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-145-32.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 7 SOUTH RIVERDALE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 23' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 20' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	323824.1 5251190.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 34 62 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 38 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	24 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1967 106 Yr Reconstructed	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	50 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 10, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	30.5 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 07/11/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/25/2017
51 Bridge Rdwy Width - Curb to Curb	30.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 28-145-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	249	100	249	0	0	0	0	0	0
206/1:Timber Column	each	14	0	0	100	14	0	0	0	0
1150/1:Check/Shake	each	14	0	0	100	14	0	0	0	0
Notes:Piles 3 and 4 (from west north abutment) have long, moderately deep weather checks. - 4/10/2019										
216/1:Timber Abutment	ft	66	0	0	100	66	0	0	0	0
1150/1:Check/Shake	ft	66	0	0	100	66	0	0	0	0
235/1:Timber Pier Cap	ft	69	0	0	100	69	0	0	0	0
1150/1:Check/Shake	ft	69	0	0	100	69	0	0	0	0
Notes:Both abutment caps developing weather checks. - 4/10/2019										
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	49	100	49	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	0	0	75	3	25	1	0	0
1900/1:Distortion	each	4	0	0	75	3	25	1	0	0
Notes:SE wing partially covered by embankment; also moderately twisted. - 4/10/2019										

Remarks: Approx. 1" spaces between horizontal placed planks in abutments and wings has been filled with expandable foam to prevent access for water erosion. Barb wire fencing attached to west opening under bridge. East half of north abutment and part of NE wing lightly fire charred. Moderately deep, vertical gully in approach inslope adjacent to SW wing. NW & SE wings have timber patches to cover holes. - 4/10/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-149-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CP RAILWAY	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 NORTH MAX	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 49' 60.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 15' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	331602.3 5300221.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	N N/A (NBI)
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	7	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 23 41 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 16 29 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1928 106 Yr Reconstructed	1984	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	2 Railroad - Under	68 Deck Geometry	4 Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	4 Tolerable
29 ADT	25 30 Year of ADT	2019	N Not applicable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	April 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	18.4 Ft.	Underwater	N
48 Length of Max Span	21 Ft.	Other Special	N
49 Structure Length	106.96 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	18.7 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	20.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	22 Ft. 2 In.	216 Inspector	Devries, Olson
	R Railroad beneath struc	Navigation Data	
55 Min Lateral UnderClear. - Rt	10.2 Ft.	38 Navigation Control	NA-no waterway
	R Railroad beneath struc	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 28-149-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	2,002	0	0	100	2,002	0	0	0	0
1150/1:Check/Shake	sq.ft	2,002	0	0	100	2,002	0	0	0	0
Notes:SEVERAL DECK PLANKS ARE SPLIT LONGITUDINALLY. - 4/9/2019										
111/1:Timber Open Girder	ft	1,499	0	0	100	1,499	0	0	0	0
1150/1:Check/Shake	ft	1,499	0	0	100	1,499	0	0	0	0
206/1:Timber Column	each	24	0	0	100	24	0	0	0	0
1150/1:Check/Shake	each	24	0	0	100	24	0	0	0	0
Notes:12"X12" TIMBER PILING HAVE LONG, DEEP, WEATHER CHECKS. - 4/9/2019										
216/1:Timber Abutment	ft	40	0	0	100	40	0	0	0	0
1150/1:Check/Shake	ft	40	0	0	100	40	0	0	0	0
235/1:Timber Pier Cap	ft	161	0	0	100	161	0	0	0	0
1150/1:Check/Shake	ft	161	0	0	100	161	0	0	0	0
Notes:Timber caps & girders showing signs of weather checks. - 4/9/2019										
332/1:Timb Bridge Railing	ft	213	0	0	100	213	0	0	0	0
1150/1:Check/Shake	ft	213	0	0	100	213	0	0	0	0

Remarks: STRUCTURE LOCATED IN MIDDLE OF SHORT "S" CURVE. WATER RUNNING UNDER NORTH AND SOUTH ENDS OF DECK HAS CUT DEEP WATER GULLIES IN SLOPES BELOW BRIDGE. NORTH ABUTMENT APPEARS TO HAVE SETTLED AS THERE IS HUMP IN DECK AT PIER 2. - 4/9/2019 South load limit sign missing. - 4/9/2019 - does not need to be posted - 7-01-19 nmh

Alert Code 1: 2' of the bottom of south abutment exposed by wash out. - 4/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-150-38.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02855 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 WEST OF WASHBURN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.398	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 18' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 12' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	332430.1 5241126.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1941 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	80 30 Year of ADT 2019	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	April 10, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Devries, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 8'X8'X46' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-150-38.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	138	0	0	99	137	0	0	1	1
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	0	0	0	0	100	1
1130/2:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:MINOR VERTICAL CRACKING IN ALL BARRELS AND SOUTH PARAPET. - 4/10/2019										
1190/2:Abrasion(PSC/RC)	ft	127	0	0	100	127	0	0	0	0
6000/2:Scour	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Minor cracks in SE & SW wingwalls. - 4/10/2019										

Remarks: Minor to moderate scour behind outer end of SE wing and to the east of wing. 4-10-19: Livestock panels across N. end accumulating debris. - 4/10/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-152-34.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02855 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MINE ROAD	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 7 WEST WASHBURN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 21' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 11' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	334358.0 5247163.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	N N/A (NBI)
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2013 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	1 Highway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	9 Above Desirable
29 ADT	160 30 Year of ADT 2019	71 Waterway Adequacy	N Not applicable
109 Average Daily Truck Traffic	50.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	0 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	October 04, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	36.0 Ft.	Underwater	N
48 Length of Max Span	114 Ft.	Other Special	N
49 Structure Length	116.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	1.5 Ft Rt-Side	Chaining Date	None
	1.5 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	36.0 Ft.	212 Structure Load Rated	11/12/2014
52 Deck Width	38.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 11 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	31 Ft. 0 In.	216 Inspector	Medler, Olson
	H Hwy beneath struct	Navigation Data	
55 Min Lateral UnderClear. - Rt	50.0 Ft.	38 Navigation Control	NA-no waterway
	H Hwy beneath struct	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	50.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
		116 Minimum Navigation Vertical Clearance	0 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-152-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,437	100	4,437	0	0	0	0	0	0
Notes:All 4 corners of deck have 5' of the edge of deck exposed. - 10/4/2019										
520/1:Conc Re Prot Sys	sq.ft	4,437	100	4,437	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	681	100	681	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	78	0	0	100	78	0	0	0	0
4000/1:Settlement	ft	78	0	0	100	78	0	0	0	0
Notes:Abutment panels show settlement and distortion up to 6" - 10/4/2019										
310/1:Elastomeric Bearing	each	12	100	12	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	236	100	236	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
Notes:The concrete panel facade extends the full length from tip of wing, through the abutment , to the tip of the other wing. 1'-2' on the ends of both North wings broke from collision damage. - 10/4/2019										
4000/2:Settlement	each	4	0	0	100	4	0	0	0	0
Notes:Wing panels showing settlement and distortion up to 6" - 10/4/2019										

Alert Code 1: Where the wall passes in front of the abutment there is a 1' void across the top of the wall to the bottom of the abutment concrete. - 10/4/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-154-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MINE HAUL ROAD	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 1 WEST UNDERWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 24' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 09' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	336871.3 5253544.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	N N/A (NBI)
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	6 Corrugated Steel	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 27 48 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 15 29 Tons
208 Dk Overburden	32 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	1 Highway - Under	68 Deck Geometry	8 Desirable Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	6 Equal Minimum
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	N Not applicable
109 Average Daily Truck Traffic	2.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.8 Ft.	Underwater	N
48 Length of Max Span	72 Ft.	Other Special	N
49 Structure Length	171.92 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	32.2 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	34.1 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	25 Ft. 0 In.	216 Inspector	Medler, Olson
	H Hwy beneath struct	Navigation Data	
55 Min Lateral UnderClear. - Rt	9.8 Ft.	38 Navigation Control	NA-no waterway
	H Hwy beneath struct	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	327.8 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-154-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
30/1:Steel Deck - Orthotropic	sq.ft	5,504	100	5,504	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	5,504	100	5,504	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	2,236	0	0	100	2,236	0	0	0	0
Notes:Top & bottom flanges of outside girders, in center span have a 3" notch removed so bridge rail posts remain in a straight line with rails in spans 1 & 3. - 10/3/2019										
1000/1:Corrosion	ft	2,236	0	0	100	2,236	0	0	0	0
Notes:Painted steel starting to freckle rust - 10/3/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	75	75	25	25	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	75	75	25	25	0	0
202/1:Steel Column	each	12	100	12	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	75	75	25	25	0	0
Notes:Painted steel starting to freckle rust - 10/3/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	75	75	25	25	0	0
217/1:Masonry Abutment	ft	68	100	68	0	0	0	0	0	0
219/1:Stl Abutment	ft	68	100	68	0	0	0	0	0	0
231/1:Steel Pier Cap	ft	136	100	136	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	75	75	25	25	0	0
Notes:Painted steel starting to freckle rust - 10/3/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	75	75	25	25	0	0
330/1:Metal Bridge Railing	ft	344	100	344	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Small washouts have exposed 1' - 2' of deck edge in all four corners. NE corner of deck has a 4' x1' x1' washout. 1" sag in girders at center of span 2. - 10/3/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-154-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MINE HAUL ROAD	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH 1 WEST UNDERWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 24' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 09' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	336739.3 5251971.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	N N/A (NBI)
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 51 92 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1998 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	1 Highway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	6 Equal Minimum
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	N Not applicable
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	35.8 Ft.	Underwater	N
48 Length of Max Span	87 Ft.	Other Special	N
49 Structure Length	86.94 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	36.1 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	37.4 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	25 Ft. 0 In.	216 Inspector	Medler, Olson
	H Hwy beneath struct	Navigation Data	
55 Min Lateral UnderClear. - Rt	9.8 Ft.	38 Navigation Control	NA-no waterway
	H Hwy beneath struct	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	327.8 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation
Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-154-31.0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-158-34.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	82.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BUFFALO CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST OF FALKIRK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 21' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 03' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	344479.4 5246882.0	Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 29 53 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 11 21 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	312 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1964 106 Yr Reconstructed	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	9 Above Desirable Crit
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	80 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	1 1 1 1
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 08, 2019
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	33.5 Ft.	Other Special	N
48 Length of Max Span	25 Ft.	218 Channel Profile	1 48 07/11/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	33.8 Ft.	213 Federal Aid Project Number	
52 Deck Width	34.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-158-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	840	100	840	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	840	100	840	0	0	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	276	91	251	9	25	0	0	0	0
1090/1:Exposed Rebar	ft	25	0	0	100	25	0	0	0	0
Notes:-Numerous small spalls along bottom of several channel beams with exposed rebar. - 4/8/2019										
206/1:Timber Column	each	16	0	0	100	16	0	0	0	0
1150/1:Check/Shake	each	16	0	0	100	16	0	0	0	0
216/1:Timber Abutment	ft	72	0	0	100	72	0	0	0	0
Notes:-Soundings indicate possible voids behind both abutments. - 4/8/2019										
1150/1:Check/Shake	ft	72	0	0	100	72	0	0	0	0
235/1:Timber Pier Cap	ft	72	100	72	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	49	94	46	0	0	6	3	0	0
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	0	0	100	3	0	0
Notes:-Spall around outside bolts that fasten nw retrofit rail post to concrete bridge curb. - 4/8/2019										
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
Notes:-Large scour hole under structure has been filled in with gravel and asphalt. - 4/8/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0
Notes:-Middle piling in NW wing is being crushed by tension on the deadman anchor. - 4/8/2019										

Remarks: -Channel turns sharply to west just south of structure. - 4/8/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-159-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	TURTLE LAKE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MCCLUSKY CANAL R1-1	102 Direction of Traffic	2 2-way traffic
09 Location	9 EAST COLEHARBOR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 32' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 02' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	346806.9 5268273.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 49 89 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1973 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	April 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	27.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	56 Ft.	Other Special	N
49 Structure Length	115.16 Ft.	218 Channel Profile	1 48 07/11/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.8 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Devries, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 28-159-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,218	69	2,218	31	1,000	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	1,000	0	0	100	1,000	0	0	0	0
Notes:In span #1 there are a few areas of minor scaling, and cracking on the deck surface. Light efflorescence along cold joints in bridge deck. - 4/9/2019										
104/1:Pre Clsd Box Girder	ft	459	100	459	0	0	0	0	0	0
Notes:All box beams in span 2 have hairline cracks towards south end. - 4/9/2019										
210/1:Re Conc Pier Wall	ft	33	100	33	0	0	0	0	0	0
Notes:Vertical, hairline crack, in pier, under second box beam from the east. - 4/9/2019										
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	230	100	230	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Concrete filled fabric slope protection has been installed on slopes in front of both abutments. South slope protection has pulled away 6.5". - 4/9/2019

Alert Code 1: Post by end terminal, for SE approach rail has severe damage. - 4/9/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-161-15.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	1 On Interstate STRAHNET
4 County Hwy 1 Mainline	02814 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 NORTH 5 WEST CLEAR LAKE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	16.497	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 37' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 00' 35.00"	112 NBIS Bridge Length	No
GPS Coordinates XY	349034.1 5277419.2	Condition	
98 Border Bridge	Unknown (P)	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	-2	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	0 Other	Load Rating and Posting	
	00 Other (NBI)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1959 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	140 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	April 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	6 Ft.	Other Special	N
49 Structure Length	5.91 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	Y
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1900
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Devries
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
SINGLE, 6X6X40' RCP		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-161-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	39	80	31	21	8	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	8	0	0	100	8	0	0	0	0
Notes:Small spalls at joints. - 4/9/2019										

Remarks: CHANNEL OVERGROWN WITH CAT TAILS. SOME DEADFALL ALSO COLLECTING IN CHANNEL. ALL SECTIONS IN PIPE HAVE BEEN TIED TO PREVENT RE-OCCURANCE OF SEPARATION. NE corner has about 4' of erosion by along side of end section. Year 2017: Minor scour on the sides of the end sections - 4/9/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-161-15.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	1 On Interstate STRAHNET
4 County Hwy 1 Mainline	02814 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 N 5 W TURTLE LAKE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	16.497	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 37' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 00' 19.00"	112 NBIS Bridge Length	No
GPS Coordinates XY	349378.6 5277410.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	-2	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	0 Other	Load Rating and Posting	
	00 Other (NBI)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1959 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	140 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	April 10, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	6 Ft.	Other Special	N
49 Structure Length	5.91 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	Y
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1900
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Devries, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
SINGLE, 6X6X40' RCP		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-161-15.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	39	100	39	0	0	0	0	0	0

Remarks: SOME DEADFALL TREES AND BRUSH AND CATTAILS IN CHANNEL. ALL PIPE SECTIONS HAVE BEEN TIED TO PREVENT RE-OCCURANCE OF SEPARATION. Year 2017: Minot scour between pipes at end sections. - 4/10/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-161-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	TURTLE LAKE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MCCLUSKY CANAL R1-1A	102 Direction of Traffic	2 2-way traffic
09 Location	11 EAST COLEHARBOR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 32' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 59' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	350039.9 5268149.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 50 91 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1973 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	April 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	24.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	56 Ft.	Other Special	N
49 Structure Length	115.16 Ft.	218 Channel Profile	1 48 07/11/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.8 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Devries, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 28-161-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,218	100	3,218	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	459	100	458	0	1	0	0	0	0
Notes:A longitudinal, hairline crack is developing a few inches up from bottom on the outer vertical face of the east outside beam, in Span one. Span 2, box beam 1, has hairline cracks towards south end. - 4/9/2019										
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Small spall in outside top edge of east bridge rail. - 4/9/2019										
210/1:Re Conc Pier Wall	ft	33	100	33	0	0	0	0	0	0
Notes:Minor hairline cracks in a couple of pier diaphragms. - 4/9/2019										
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	230	100	230	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	230	100	230	0	0	0	0	0	0
Notes:Several vertical hairline cracks in bridge curbs. - 4/9/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Small spall in outside top edge of east bridge rail. Concrete filled fabric slope protection has been placed in front of both abutments. Slope protection starting to pull away from abutments. 1" steel utility conduit mounted on east curb. - 4/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-162-39.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02840 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST OF WASHBURN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.500	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 17' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 57' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	351498.4 5238897.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 27 49 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 29 Tons
208 Dk Overburden	34 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1963 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	220 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	3 SC - Unstable
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 05/30/2013
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/25/2017
	28.5 Ft.	213 Federal Aid Project Number	CS-908(3)
52 Deck Width	31.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 28-162-39.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	883	95	839	5	44	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	279	0	0	98	273	2	6	0	0
1090/1:Exposed Rebar	ft	6	0	0	0	0	100	6	0	0
Notes:There is a 6' long honeycomb section on the bottom of the beam in the SE corner with rebar exposed. - 4/8/2019										
1130/1:Cracking (RC and Other)	ft	273	0	0	100	273	0	0	0	0
Notes:Minor to moderate transverse cracks across bottom and partway up sides of beam portion of channel beams; more numerous near mid-span. - 4/8/2019										
203/1:Other Column	each	1	100	1	0	0	0	0	0	0
Notes:3/24/2017 - Damaged pile repaired. Replaced with a concrete filled 42" metal culvert. - 4/8/2019										
206/1:Timber Column	each	13	0	0	100	13	0	0	0	0
216/1:Timber Abutment	ft	59	0	0	100	59	0	0	0	0
235/1:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	62	100	62	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	62	0	0	100	62	0	0	0	0
Notes:There are hairline cracks in the curb. - 4/8/2019										
510/1:Wearing Surfaces	sq.ft	883	95	839	5	44	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
7000/1:Damage	each	13	0	0	100	13	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: Shoulder delineators are in place on east side of structure. Channel bank sloughing by SW & NE wings. Some rip rap has been placed on east bank downstream from bridge. End markers are up. - 4/8/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-163-43.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PAINTED WOODS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 SOUTHEAST OF WASHBURN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 14' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 56' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	352440.8 5233967.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	April 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	45.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	05/25/2016
	0.0 Ft.	213 Federal Aid Project Number	BRO-0028(021)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Devries
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 28-163-43.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	201	100	201	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0

Notes: 1x1 Spall on top of the SW wing - 4/8/2019

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SEC 409

Structure Number: 28-164-41.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PAINTED WOODS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 5 SOUTH WASHBURN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 15' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 55' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	354752.1 5235756.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 15 28 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	1950 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	7 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	April 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	73 Ft.	Other Special	N
49 Structure Length	75.13 Ft.	218 Channel Profile	1 48 07/11/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	27.9 Ft.	213 Federal Aid Project Number	SRS-1144(1)081
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-164-41.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,099	95	1,994	5	105	0	0	0	0
Notes:Approach edges of deck chipped. Deck also has a few longitudinal hairline cracks. - 4/8/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	105	0	0	100	105	0	0	0	0
Notes:Minor to moderate surface abrasion to concrete deck surface . - 4/8/2019										
104/1:Pre Clsd Box Girder	ft	374	100	374	0	0	0	0	0	0
Notes:Bottoms of diaphragms at midspan have minor spalls. - 4/8/2019										
206/1:Timber Column	each	16	100	16	0	0	0	0	0	0
216/1:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	151	100	151	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	151	100	151	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Small washout starting behind abutment in NW corner. Guard rail post has cut off from approach rail in SE corner. Deep gully has formed in road ditch where it empties into creek adjacent to SE corner of bridge. - 4/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-165-32.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 7 NORTH WASHBURN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 23' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 54' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	355739.3 5249809.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 38 69 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 23 41 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	24 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1947 106 Yr Reconstructed	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	40 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	7 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 08, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 07/11/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	01/31/2017
51 Bridge Rdwy Width - Curb to Curb	23.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-165-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	592	95	562	5	30	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	30	0	0	100	30	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	226	0	0	100	226	0	0	0	0
1000/1:Corrosion	ft	226	0	0	100	226	0	0	0	0
Notes:-I-beam girders rusted; no loss of section. - 4/8/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	49	0	0	0	0	100	49	0	0
Notes:-There is 6 - 8" gap at top of abutment where beams and diaphragms extend beyond abutment. - 4/8/2019										
1190/1:Abrasion(PSC/RC)	ft	49	0	0	0	0	100	49	0	0
Notes:-Concrete deck and abutments have moderate cracking and deterioration. - 4/8/2019										
330/1:Metal Bridge Railing	ft	49	0	0	0	0	100	49	0	0
7000/1:Damage	ft	49	0	0	0	0	100	49	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: -Deck has been widened two feet on either side. -Knee braces were bolted to outside girders at two foot spacing and covered with corrugated steel. -It is being held from further movement by the end knee braces that support deck widening. -End markers are up. - 4/8/2019

Alert Code 2: NE corner of 2' deck hit by blade and tore loose exposing sharp edge and hole in deck - 4/8/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-166-22.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Major Collector
04 City	LAKE WILLIAMS TOWNSH	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02822 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MCCLUSKY CANAL R1-3	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH TURTLE LAKE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	11.198	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 32' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 53' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	358020.9 5266225.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 52 94 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 22 40 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1973 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	165 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	13.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	April 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	8.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	56 Ft.	Other Special	N
49 Structure Length	115.16 Ft.	218 Channel Profile	1 48 07/11/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 28-166-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,229	95	3,068	5	161	0	0	0	0
Notes:SOME EFFLORESCENCE ALONG SEAMS IN BRIDGE DECK. - 4/9/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	161	0	0	100	161	0	0	0	0
104/1:Pre Clsd Box Girder	ft	459	100	459	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	33	100	33	0	0	0	0	0	0
Notes:VERTICAL HAIRLINE CRACK UNDER SECOND BEAM FROM EAST IN THE PIER, ABOUT 3/4 HEIGHT OF THE PIER. - 4/9/2019										
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	230	100	229	0	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:END OF BRIDGE RAIL CHIPPED AND CURB GOUGED AT NW CORNER OF STRUCTURE. - 4/9/2019										
1130/1:Cracking (RC and Other)	ft	230	100	230	0	0	0	0	0	0
Notes:SEVERAL VERTICAL HAIRLINE CRACKS IN BRIDGE CURB, minor-no defect. - 4/9/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:LARGE RIP RAP HAS BEEN PLACED ON INSLOPES IN FRONT OF BOTH ABUTMENTS. - 4/9/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Year 2017: Top of both of the S. wing walls are spalled (chipped) from RipRap placement, minor-no defect. - 4/9/2019										

Remarks: CHANNEL BANK SLOUGHING (MODERATE) UNDER STRUCTURE. - 4/9/2019**Alert Code 1:** -All of base of north abutment exposed with rip rap in front of it.-Middle third of south abutment also exposed due to settlement of rip rap. - 4/9/2019

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Structure Number: 28-166-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MCCLUSKY CANAL R1-6	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH TURTLE LAKE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 28' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 53' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	357772.5 5258888.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1974 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	0 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	April 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	27.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	55 Ft.	Other Special	N
49 Structure Length	113.85 Ft.	218 Channel Profile	1 48 07/11/2017
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.8 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Devries, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 28-166-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,197	94	2,997	6	200	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	200	0	0	100	200	0	0	0	0
Notes:-Outline of transverse bars showing on deck surface in random locations. -Concrete beginning to spall. -Concrete moderately scaled near centerline of bridge approx. 15 ft.from south end. - 4/8/2019										
104/1:Pre Clsd Box Girder	ft	456	97	441	3	15	0	0	0	0
1130/1:Cracking (RC and Other)	ft	446	97	431	3	15	0	0	0	0
Notes:Minor, longitudinal cracks developing on the vertical faces of all box beams in Span one. - 4/8/2019										
210/1:Re Conc Pier Wall	ft	33	91	30	9	3	0	0	0	0
1130/1:Cracking (RC and Other)	ft	33	91	30	9	3	0	0	0	0
Notes:-There are three hairline cracks in the pier, one at centerline, one under each beam lt. and rt. of center. -Cracks are approx. 4 ft. Long and are full thickness of pier. - 4/8/2019										
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	226	100	226	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
Notes:-Coarse rock and large rip rap have been placed along inslope in front of both abutments. - 4/8/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: -Undercutting of abutment has been repaired by forming and filling with concrete. - 4/8/2019**Alert Code 1:** -0.60 MM crack, 15 Ft. long on the vertical face of the east outside box beam, in Span one. -Middle of south abutment exposed in an area where concrete wasn't placed during the settlement repair.-Random horizontal hairline cracks in all other beams. - 4/8/2019

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Structure Number: 28-166-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MCCLUSKY CANAL R2-0	102 Direction of Traffic	2 2-way traffic
09 Location	6 SOUTH TURTLE LAKE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 26' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 54' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	356541.9 5255343.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 49 88 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1974 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	April 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	51 Ft.	Other Special	N
49 Structure Length	106.96 Ft.	218 Channel Profile	1 48 07/10/2017
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.8 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Devries, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Structure Number: 28-166-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,992	95	2,842	5	150	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	150	0	0	100	150	0	0	0	0
Notes:-Minor hairline cracks in concrete surface; also the underside of the deck. - 4/8/2019										
104/1:Pre Clsd Box Girder	ft	427	100	427	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	33	100	33	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	213	100	213	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:-West embankment has been rip rapped; but further settlement of the inslope has re-exposed the base of the abutment. - 4/8/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: -PVC conduit is attached to outside of north curb. -End markers are up. - 4/8/2019

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Structure Number: 28-166-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TURTLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 4 NORTH WASHBURN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 20' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 53' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	356627.8 5244926.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 39 71 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	23 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1966 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	65 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	3 SC - Unstable
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	25 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 07/11/2017
50 Curb/Sidewalk Widths	1.6 Ft Rt-Side	Chaining Date	None
	1.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.5 Ft.	213 Federal Aid Project Number	CS-90(3)
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 28-166-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	710	100	710	0	0	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	226	0	0	100	226	0	0	0	0
1130/1:Cracking (RC and Other)	ft	226	0	0	100	226	0	0	0	0
Notes:-Spall developing on bottom of 2nd beam from north side. - 4/8/2019										
206/1:Timber Column	each	14	0	0	93	13	0	0	7	1
1150/1:Check/Shake	each	13	0	0	100	13	0	0	0	0
7000/1:Damage	each	1	0	0	0	0	0	0	100	1
Notes:First piling on north end of east abutment splintered in two by debris collision. - 4/8/2019										
216/1:Timber Abutment	ft	69	0	0	100	69	0	0	0	0
1900/1:Distortion	ft	69	0	0	100	69	0	0	0	0
Notes:-SE corner of abutment 2 leaning back 6". -SW corner of abutment 1 leaning in 6". - 4/8/2019										
235/1:Timber Pier Cap	ft	69	100	69	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3420/1:Peel/Bub/Crack(Stl Protect Cd	sq.ft	100	0	0	0	0	100	100	0	0
331/1:Re Conc Bridge Railing	ft	49	100	49	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: -Deep scour hole under and to down stream side of bridge. -Erosion by SE corner of east abutment. - 4/8/2019

Alert Code 1: Transverse, hairline cracks found along bottom; then approx. halfway up the sides of the beam portion of the concrete channel beams. This problem found full length of most of the beams and are evenly spaced. - 4/8/2019

Alert Code 2: First piling on north end of east abutment splintered in two by debris collision. - 4/8/2019

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SEC 409

Structure Number: 28-167-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	LAKE WILLIAMS TOWNSH	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MCCLUSKY CANAL R1-3A	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST OF TURTLE LAKE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 30' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 52' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	359219.3 5264247.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 52 94 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 23 43 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1973 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	130 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	April 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	14.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	51 Ft.	Other Special	N
49 Structure Length	106.96 Ft.	218 Channel Profile	1 48 07/11/2017
50 Curb/Sidewalk Widths	2.3 Ft Rt-Side	Chaining Date	None
	2.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	33.1 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Devries, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 28-167-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,992	90	2,692	10	300	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	300	0	0	100	300	0	0	0	0
Notes:15' X 20' AREA OF MODERATE SCALING FOUND ON DECK SURFACE AT MID POINT OF THE BRIDGE. - 4/9/2019										
104/1:Pre Clsd Box Girder	ft	427	100	427	0	0	0	0	0	0
Notes:-Span 1, north & south box beams have hairline crack at west end. -Span 2, all box beams have hairline cracks at east end. - 4/9/2019										
210/1:Re Conc Pier Wall	ft	33	100	33	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	213	100	213	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 3 STEEL CONDUITS ATTACHED TO SOUTH SIDE OF BRIDGE RAIL. EMBANKMENT EROSION ALONG FACE OF ABUTMENTS HAS BEEN COVERED WITH LARGE RIPRAP. UNDERCUTTING OF ABUTMENT WAS BEEN FILLED BY FORMING, THEN POURING CONCRETE. SETTLEMENT OF REPAIR HAS RE-EXPOSED BASE OF WEST ABUTMENT. WELL DEFINED ,VERTICAL CRACKS FOUND IN BRIDGE CURBS. - 4/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-167-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MCCLUSKY CANAL R2-0A	102 Direction of Traffic	2 2-way traffic
09 Location	7 SOUTH TURTLE LAKE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 25' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 53' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	357907.2 5253547.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 42 77 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 31 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1976 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	April 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	80 Ft.	Other Special	N
49 Structure Length	240.16 Ft.	218 Channel Profile	1 48 07/10/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-167-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	2,402	98	2,347	2	55	0	0	0	0
Notes:-Random, longitudinal, hairline cracks found on outer vertical surface of box beams. 1st beam from the west on span 3 has cracking on the outside face. Minor cracking and efflorescence at wing wall and abutment joints. -Grouted seams between box beams have evidence of minor seepage. -Small spalls on deck/box beam surface were filled with epoxy grout. - 4/8/2019										
1080/1:Delamination/Spall/Patched Area	ft	55	0	0	100	55	0	0	0	0
Notes:-Small rust stains developing along bottom of some of box beams. -End beam diaphragm at SW corner breaking up. - 4/8/2019										
204/1:Pre Conc Column	each	4	100	4	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	59	90	53	10	6	0	0	0	0
1120/1:Efflorescence/Rust Staining	ft	59	90	53	10	6	0	0	0	0
233/1:Pre Conc Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	479	100	479	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	479	100	479	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes:-NW wing has minor surface damage. - 4/8/2019										

Remarks: -Minor seepage occurring around deteriorating expansion materials between wing and end beam diaphragms at all corners of structure. - 4/8/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-168-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	63.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MCCLUSKY CANAL R2-1	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 6 SOUTH MERCER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 24' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 50' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	360874.5 5251339.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 47 86 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1973 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	2 Intolerable - Replace
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100,000 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	0 0 1 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	April 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	6.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	51 Ft.	Other Special	N
49 Structure Length	106.96 Ft.	218 Channel Profile	1 48 07/10/2017
50 Curb/Sidewalk Widths	2.3 Ft Rt-Side	Chaining Date	None
	2.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	27.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-168-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,992	95	2,842	5	150	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	2,992	95	2,842	5	150	0	0	0	0
Notes:-Deck surface has several scaled areas. - 4/8/2019										
104/1:Pre Clsd Box Girder	ft	427	99	424	1	3	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:-In the 1st beam from the west by north abutment, there is a 0.5 sq ft chip. - 4/8/2019										
210/1:Re Conc Pier Wall	ft	33	100	33	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	33	100	33	0	0	0	0	0	0
Notes:-There is a vertical hairline crack in pier under second beam from the west. - 4/8/2019										
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	213	100	212	1	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
Notes:Rip rapping of south embankment covered exposed south abutment footing. - 4/8/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: -A PVC conduit is attached to west curb. . - 4/8/2019**Alert Code 1:** 4-8-19: 3/4th of bottom of north abutment exposed by displacement of riprap. - 4/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-169-40.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PAINTED WOODS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 NORTH 1 WEST WILTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 16' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 48' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	362645.8 5237114.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 36 65 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1978 106 Yr Reconstructed	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	1 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 08, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	25.3 Ft.	Other Special	N
48 Length of Max Span	48 Ft.	218 Channel Profile	1 48 07/11/2017
49 Structure Length	49.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	1.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	25.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-169-40.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	1,401	99	1,387	1	14	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	14	0	0	100	14	0	0	0	0
Notes:End beam diaphragms spalled in NW and SE corners of structure. Some of the beams have light honeycomb sections from when they were cast. A one ft. square spall on one of beams near centerline of bridge, by west abutment Small section of end beam diaphragm (between beam and wing) is missing in NW corner. Short diagonal cracks found in first and second beams (in third quad-t from north) where they bear on east abutment. - 4/8/2019										
215/1:Re Conc Abutment	ft	52	100	52	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	98	100	98	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor cracking in jersey barriers. End markers in place. - 4/8/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-170-40.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	McLean	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PAINTED WOODS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 NORTH WILTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 16' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 47' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	364485.8 5237132.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2007 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	120 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	13.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	32 Ft.	90 Date of Last Inspection	April 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.8 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	46.92 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0028(017)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Devries, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD, 11 X 9 X 52' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 28-170-40.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	280	100	280	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: SMALL SPALLS ALONG END SECTION JOINTS. - 4/8/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 29-101-12.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Mercer	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02901 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 N 6 W GOLDEN VALLEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	4.399	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 23' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 11' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	259692.3 5253711.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	19 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	65 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	April 18, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	57 Ft.	Other Special	N
49 Structure Length	61.02 Ft.	218 Channel Profile	1 48 04/17/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	CBRS-2901(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 29-101-12.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,862	100	1,862	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	243	100	243	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	121	99	120	1	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 04/18/2018-NBI Remarks: Some transverse hairline cracks with seepage visible under- side of deck. Ten of them. END MARKERS NOT STANDARD. 6" x 6" spall north side + southside of west barrier.

Alert Code 1: 04/18/2018 - Non standard end markers

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 29-102-12.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	47.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Mercer	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 N 6 W OF GOLDEN VALLEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 23' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 10' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	260322.3 5252939.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 10 18 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 6 11 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	08 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed	1987	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT	2018	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	17 Ft.	90 Date of Last Inspection	April 18, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	20.3 Ft.	Underwater	N
48 Length of Max Span	24 Ft.	Other Special	N
49 Structure Length	26.90 Ft.	218 Channel Profile	1 48 04/17/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	20.3 Ft.	212 Structure Load Rated	01/31/2017
52 Deck Width	20.3 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 29-102-12.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	549	100	549	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	190	0	0	100	190	0	0	0	0
1000/1:Corrosion	ft	190	0	0	100	190	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
111/1:Timber Open Girder	ft	104	0	0	100	104	0	0	0	0
1180/1:Abrasion	ft	104	0	0	100	104	0	0	0	0
202/3:Steel Column	each	14	0	0	100	14	0	0	0	0
1900/3:Distortion	each	14	0	0	100	14	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
216/3:Timber Abutment	ft	39	0	0	100	39	0	0	0	0
1900/3:Distortion	ft	39	0	0	100	39	0	0	0	0
231/1:Steel Pier Cap	ft	100	100	100	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
330/1:Metal Bridge Railing	ft	104	100	104	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
1180/2:Abrasion	each	4	0	0	100	4	0	0	0	0

Remarks: 04/18/2018 - Fence across North opening is now underneath the bridge. NBI Remarks: Stringers and piling have minor rust. ALL H PILING SLIGHTLY BOWING INWARD. Backfill being lost at the NE corner of west abutment,

Alert Code 1: 04/18/2018 - No end markers in place.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 29-104-19.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Mercer	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST OF GOLDEN VALLEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 17' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 07' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	263387.4 5241582.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Slab		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 54 97 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 33 60 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	206 Gravel/Dirt	209 Posted in "Tons"	15 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed -1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	5 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 18, 2018
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	20 Ft.	218 Channel Profile	1 48 04/17/2019
49 Structure Length	21.98 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 29-104-19.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
38/1:Re Concrete Slab	sq.ft	506	100	506	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	49	0	0	100	49	0	0	0	0
1130/3:Cracking (RC and Other)	ft	49	0	0	100	49	0	0	0	0
Notes:_										
330/1:Metal Bridge Railing	ft	43	0	0	100	43	0	0	0	0
1000/1:Corrosion	ft	43	0	0	100	43	0	0	0	0
1010/1:Cracking	ft	43	0	0	100	43	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
331/1:Re Conc Bridge Railing	ft	43	0	0	100	43	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: 04/18/2018-MINOR CRACKS IN BOTH BACKWALLS & WINGS. POOR SIGHT DISTANCE BOTH DIRECTIONS DUE TO VERTICAL CURVES. POSTED 15 TONS. 6" OF GRAVEL ON DECK. Hairline vertical crack in center of both abutments full length.

Alert Code 1: 04/18/2018- No end markers in place.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 29-105-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	75.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Mercer	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 N 1 W OF GOLDEN VALLEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 20' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 05' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	265910.3 5248126.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 17 31 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 10 19 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	204 Gravel/Dirt	209 Posted in "Tons"	20 Tons
Age and Service		Appraisal	
27 Yr Built	1935 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	3 SC - Unstable
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 18, 2018
32 Approach Roadway Width	21 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.0 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 04/17/2019
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/31/2017
51 Bridge Rdwy Width - Curb to Curb	22.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 29-105-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	700	0	0	100	700	0	0	0	0
1180/1:Abrasion	sq.ft	700	0	0	227	700	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	308	0	0	100	308	0	0	0	0
1000/1:Corrosion	ft	308	0	0	100	308	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
206/3:Timber Column	each	12	92	11	8	1	0	0	0	0
1180/3:Abrasion	each	1	0	0	100	1	0	0	0	0
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	62	100	62	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1180/3:Abrasion	each	4	0	0	100	4	0	0	0	0

Remarks: 04/18/2018 - NBI Remarks: Stringers have minor rust. End markers are in place but not standard. Third pile from west south abutment starting to broom. CENTER PILE ON NE,NW & SW WINGS PULLING AWAY FROM PLANKS. Noth abutment leaning away.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 29-105-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Mercer	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST OF GOLDEN VALLEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 17' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 06' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	264373.7 5241424.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 33 60 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 20 36 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	10 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 18, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	15.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.0 Ft.	Other Special	N
48 Length of Max Span	64 Ft.	218 Channel Profile	1 48 04/17/2019
49 Structure Length	70.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/31/2017
51 Bridge Rdwy Width - Curb to Curb	22.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 29-105-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,711	89	1,519	11	192	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	192	0	0	223	192	0	0	0	0
Notes: _										
107/1:Steel Opn Girder/Beam	ft	285	0	0	100	285	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
215/2:Re Conc Abutment	ft	49	0	0	100	49	0	0	0	0
1130/2:Cracking (RC and Other)	ft	49	0	0	100	49	0	0	0	0
311/1:Moveable Bearing	each	4	0	0	100	4	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
313/1:Fixed Bearing	each	4	0	0	100	4	0	0	0	0
1000/1:Corrosion	each	4	0	0	100	4	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
330/1:Metal Bridge Railing	ft	141	100	141	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
331/1:Re Conc Bridge Railing	ft	141	99	140	1	1	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 04/18/2018 HAIRLINE CRACK EAST ABUTMENT.MOST OF DECK DRAINS PLUGGED. ROCKERS TIPPED 1" AWAY FROM FIXED END @ 52 DEGREES F. TRANSVERSE CRACKS AT AND MIDWAY BETWEEN EACH DIAPHRAM. SOME MODERATE RUSTING OCCURRING ON TOP FLANGES DUE TO SEEPAGE THRU DECK, UNABLE TO MEASURE ANY SECTION LOSS, NOT ENTIRE LENGTH OF BEAMS JUST A FEW SPOTS ON EACH BEAM. SECOND OUTER DIAPHRAM BRACE FROM WEST IS BENT ON S SIDE. Minor spalling at transverse cracklines on underside of deck.

Alert Code 1: 04/18/2018-Minor scour developing upstream of old east abutment.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 29-106-13.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Mercer	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 NORTH OF GOLDEN VALLEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 22' 17.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 05' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	267066.3 5251061.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 35 63 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 38 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	15 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed -1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	35 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 18, 2018
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.3 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 04/17/2019
49 Structure Length	25.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/25/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 29-106-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	207	99	205	1	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
206/3:Timber Column	each	12	100	12	0	0	0	0	0	0
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	52	100	52	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 04/18/2018-NBI Remarks: The spall on third beam is very minor but has steel exposed. End markers in place but not standard, channel bloked downstream blocking flow.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 29-106-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Mercer	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF GOLDEN VALLEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 17' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 04' 52.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	267029.9 5241714.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 33 61 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	April 18, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	57 Ft.	Other Special	N
49 Structure Length	119.09 Ft.	218 Channel Profile	1 48 04/17/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	27.9 Ft.	213 Federal Aid Project Number	BRO-29(3)
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 29-106-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,627	100	3,627	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	476	100	476	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	98	61	2	1	0	0	0	0
1130/3:Cracking (RC and Other)	ft	1	0	0	100	1	0	0	0	0
Notes: _										
331/1:Re Conc Bridge Railing	ft	240	96	230	4	10	0	0	0	0
1130/1:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 04/18/2018-NBI Remarks: Diagonal contaminated cracks from inside edge of exterior beams to backwalls of abuts. Evident in all four corners. NE end markers not to standard

Alert Code 1: 04/18/2018-Large tree caught on top of pier.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 29-107-20.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Mercer	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	02905 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF GOLDEN VALLEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	22.395	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 16' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 03' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	268530.4 5240882.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 54 97 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 21 39 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	1 0 0 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	April 18, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	68 Ft.	Other Special	N
49 Structure Length	141.08 Ft.	218 Channel Profile	1 48 04/17/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	CBRS-2905(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 29-107-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,295	100	4,283	0	12	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	12	0	0	100	12	0	0	0	0
104/1:Pre Clsd Box Girder	ft	564	100	564	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	282	96	270	4	12	0	0	0	0
1130/1:Cracking (RC and Other)	ft	12	0	0	100	12	0	0	0	0
Notes:_										
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 04/18/2018-NBI Remarks: Barrier walls have minor hairline cracking. Deck has hairline cracking in transverse direction on top. NE & SE end markers are not standard

Alert Code 1: 04/18/2018-Minor local scour on n side of pier.the sw end treatment has been hit and damaged.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-104-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE AREA	102 Direction of Traffic	2 2-way traffic
09 Location	7 SOUTH OF HEBRON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 17.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 01' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	268662.2 5187914.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	0 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	29.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	03/24/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 14' X 7' X 25' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-104-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	50	98	49	2	1	0	0	0	0
Notes: _										
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/19/18, End markers not to standard. Center wing on south end has 5"x3" spall with steel exposed, no section loss.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-105-07.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Principal, Principal Arterial - Other
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
04 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE AREA	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 SOUTH OF HEBRON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 59' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	272079.0 5197025.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 41 75 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	N Not Applicable	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	2016 106 Yr Reconstructed	67 Structural Condition	9 Above Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	N Not applicable (NBI)
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	10 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic		36 Traffic Safety Features	N N 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 27, 2018
32 Approach Roadway Width	50 Ft.	91 Designated Inspection Frequency	48 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	50.0 Ft.	Other Special	N
48 Length of Max Span	10 Ft.	218 Channel Profile	0 0
49 Structure Length	20.67 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	11/28/2018
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
DOUBLE 10 X 10 X 30 RCB			

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-105-07.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	60	100	60	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/15/16 - County replaced bridge with a double 10'x10'x30' RCB no end markes in place, spall 1'x6" east center wing with rebar exposed.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-108-09.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03006 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE AREA	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH 6 EAST OF HEBRON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	9.298	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 56' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	276393.6 5193991.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1965 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	470 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	November 26, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 12X10X48' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-108-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	144	0	0	97	139	4	5	0	0
1130/3:Cracking (RC and Other)	ft	144	0	0	97	139	4	5	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
1130/3:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
8402/2:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: 11/26/2018- Cracking in walls and headwall. Rusting on roof from steel and steel supports to close to forms during construction. Spall on top of nw wing 1'x1'.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-108-09.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03006 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE AREA	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 6 EAST OF HEBRON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.798	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 56' 07.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	276282.5 5194197.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1965 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	470 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	November 26, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X5X62' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-108-09.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	187	0	0	98	184	2	3	0	0
1080/3:Delamination/Spall/Patched Area	ft	3	0	0	0	0	100	3	0	0
1130/3:Cracking (RC and Other)	ft	184	0	0	100	184	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
8402/2:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: 11/26/2018- Spall east east joint n&s barrels 2.5'x 4". Few small spalls north barrel west end. Minor cracks in both headwalls. Minor hairline cracks in floor of both barrels. East construction joint pulled apart 1".

Alert Code 1: Scour west end both barrels 2'x3'x21', also has 1' of under mining.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-108-16.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03018 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HEART BUTTE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 5 SOUTH GLEN ULLIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.298	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 45' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 55' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	276340.3 5181742.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2002 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	96 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRC-3018(051)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14X8X50' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-108-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	102	100	102	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/1:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: 11/19/2018- All wings pulled away from walls about 1½".

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-118-12.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03020 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	KURTZ CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST OF GLEN ULLIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.099	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 43' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	292030.0 5188258.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	72 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 20, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.98 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBRS-3020(55) SITE 1
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 9X7X84' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-118-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	137	100	137	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/2:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: 11/20/18- Channel agrading downstream 2' x 50' both barrels.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-119-21.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	38.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE AREA	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 9 WEST OF ALMONT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 40' 27.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 41' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	293609.5 5172491.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 13 23 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 8 15 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	17 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	5 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 05, 2018
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	20.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	18.4 Ft.	Other Special	N
48 Length of Max Span	31 Ft.	218 Channel Profile	Y 48 06/02/2016
49 Structure Length	33.14 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	05/21/2014
51 Bridge Rdwy Width - Curb to Curb	18.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	19.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-119-21.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	646	0	0	0	0	100	646	0	0
1180/1:Abrasion	sq.ft	646	0	0	0	0	100	646	0	0
111/2:Timber Open Girder	ft	463	0	0	0	0	83	384	17	79
1140/2:Decay/Section Loss	ft	79	0	0	0	0	0	0	100	79
1180/2:Abrasion	ft	384	0	0	0	0	100	384	0	0
206/3:Timber Column	each	10	0	0	70	7	20	2	10	1
1170/3:Split/Delamination (Timber)	each	3	0	0	0	0	67	2	33	1
1180/3:Abrasion	each	7	0	0	100	7	0	0	0	0
216/3:Timber Abutment	ft	39	92	36	0	0	0	0	8	3
7000/3:Damage	ft	3	0	0	0	0	0	0	100	3
235/2:Timber Pier Cap	ft	49	0	0	49	24	51	25	0	0
1180/2:Abrasion	ft	24	0	0	100	24	0	0	0	0
1900/2:Distortion	ft	25	0	0	0	0	100	25	0	0
332/2:Timb Bridge Railing	ft	66	0	0	0	0	0	0	100	66
7000/2:Damage	ft	66	0	0	0	0	0	0	100	66
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
1900/3:Distortion	each	1	0	0	100	1	0	0	0	0

Remarks: 11/5/18- 2" of scoria on deck. Sight distance poor from both directions due to horizontal & vertical curves. SE & NW end markers are gone. 2 boards on east backwall cracked from ice damage one on the west. South pile east abut. minor damage. HOLE IN SE CORNER OF THE DECK 6" IN DIAMETER. The 2nd pile from north on west abutment is split from top for 1 ft. Top boards on south bridge rail are loose. The first deck board on east end is loose. Beaver dam down stream 50'.

Alert Code 1: All stringers showing decay. outside stringer on north has three inch section loss on bottom entire length. scour around both ne & se wings 5'x 10'long.

Alert Code 2: 11/5/18 - Movement has started on this bridge. Girders starting to twist as movement of bridge is moving southward. The east abutment is leaning in towards channel. The east pier cap is rotating away from channel. The west pier cap is rotating away from channel.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-119-21.2

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	49.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 9 WEST OF ALMONT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 40' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 41' 52.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	293677.9 5172922.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 27 48 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 17 32 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	100 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1970 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	5 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 05, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	Y 48 06/02/2016
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-119-21.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	614	0	0	100	614	0	0	0	0
1180/1:Abrasion	sq.ft	614	0	0	100	614	0	0	0	0
111/2:Timber Open Girder	ft	299	0	0	100	299	0	0	0	0
1180/2:Abrasion	ft	299	0	0	100	299	0	0	0	0
206/3:Timber Column	each	12	0	0	67	8	8	1	25	3
1180/3:Abrasion	each	8	0	0	100	8	0	0	0	0
1900/3:Distortion	each	4	0	0	0	0	25	1	75	3
216/3:Timber Abutment	ft	49	0	0	49	24	51	25	0	0
1180/3:Abrasion	ft	24	0	0	100	24	0	0	0	0
1900/3:Distortion	ft	25	0	0	0	0	100	25	0	0
235/2:Timber Pier Cap	ft	52	0	0	50	26	0	0	50	26
1180/2:Abrasion	ft	26	0	0	100	26	0	0	0	0
1900/2:Distortion	ft	26	0	0	0	0	0	0	100	26
332/2:Timb Bridge Railing	ft	49	0	0	100	49	0	0	0	0
1180/2:Abrasion	ft	49	0	0	100	49	0	0	0	0
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
1180/3:Abrasion	each	2	0	0	100	2	0	0	0	0

Remarks: 11/5/18- SE corner cap and pile show impact from ice very minor. This bridge may need re-evaluating for load limit. NE & SW END MARKERS MISSING. Poor visibility due to vertical curves both directions. Erosion behind SW and SE wings. 1 broken board at top of SW wing.

Alert Code 2: 11/5/18- TOP OF SOUTH PILE CAP TWISTED 2 1/2" SOUTH. ALL STRINGERS ON SOUTH PILE CAP SUPPORTED BY south EDGE OF CAP. BACKWALL leaning SOUTH 2" IN 16". South abutment needs review. 2 pile on south abutment no longer supporting pier cap.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-119-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE AREA	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH 9 WEST OF ALMONT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 39' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 42' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	293419.1 5170909.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2005 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	November 05, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	2.6 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	35.10 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DPI-0036(006)304
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14 X 8 X 64' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-119-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	128	100	128	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/1:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: 11/5/18 - SPALL ON SOUTH END OF WEST BARREL. Spall on south end of east barrel. Center of both parapets have spalls. 3 ft of fascia concrete missing from wing of north center wall. Fascia concrete on wing of south center wall has missing pieces at water line. Debris starting to build in south end of west barrel. Beaver dam up stream 75'.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-120-12.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03020 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 1 SOUTH GLEN ULLIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	4.599	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 41' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	294507.7 5187237.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1994 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	72 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 20, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	22.97 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DPI-0179(001)302
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 11X6X90' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-120-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	180	100	180	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/2:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: 11/20/18- Silt built up @ outlet end west barrel 2 'higher than flow line, no silt in either barrel.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-120-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	49.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE AREA	102 Direction of Traffic	2 2-way traffic
09 Location	5 SOUTH 8 WEST OF ALMONT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 39' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 40' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	295204.8 5169995.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 8 15 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 3 7 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	16 Tons
Age and Service		Appraisal	
27 Yr Built	1966 106 Yr Reconstructed	1989	
42 Type of Service	1 Highway - On	67 Structural Condition	2 Intolerable - Replace
	5 Waterway - Under	68 Deck Geometry	4 Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT	2018	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 05, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.0 Ft.	Underwater	N
48 Length of Max Span	30 Ft.	Other Special	N
49 Structure Length	32.15 Ft.	218 Channel Profile	Y 48 06/02/2016
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	19.4 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	20.3 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-120-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	646	0	0	100	646	0	0	0	0
1180/1:Abrasion	sq.ft	646	0	0	100	646	0	0	0	0
111/2:Timber Open Girder	ft	479	25	120	63	300	12	59	0	0
1160/2:Crack (Timber)	ft	59	0	0	0	0	100	59	0	0
1180/2:Abrasion	ft	300	0	0	100	300	0	0	0	0
206/3:Timber Column	each	10	0	0	80	8	10	1	10	1
1140/3:Decay/Section Loss	each	1	0	0	0	0	0	0	100	1
1160/3:Crack (Timber)	each	1	0	0	0	0	100	1	0	0
1180/3:Abrasion	each	8	0	0	100	8	0	0	0	0
216/3:Timber Abutment	ft	43	0	0	100	43	0	0	0	0
1180/3:Abrasion	ft	43	0	0	100	43	0	0	0	0
235/2:Timber Pier Cap	ft	43	100	43	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	128	0	0	81	103	0	0	20	25
1180/2:Abrasion	ft	103	0	0	86	103	0	0	0	0
7000/2:Damage	ft	25	0	0	0	0	0	0	313	25
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/5/18- Road alignment poor from both directions due to vertical curves. Piles in south abutment starting to show decay at water line.15' of curb on SW corner gone. NE & SW end markers missing. NE & NW wings have minor washing behind them. NE bridge railing 10' missing.

Alert Code 1: 11/5/18- NE & SW end markers missing.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-121-09.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	EAST WILSON CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	11 WEST OF NEW SALEM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 39' 40.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	297119.7 5191697.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2017 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 20, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	04/10/2018
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 10 X 7 X 143' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-121-09.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	286	100	286	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 7/2017 / Bridge to be replaced with a RCB in 2017. Bridge replaced.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-121-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILSON CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 EAST 1 NORTH GLEN ULLIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 39' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	297195.0 5189997.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2009 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	15 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 20, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	55.8 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0030(040)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12'X 13'X 56' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-121-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	112	100	112	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/20/18- Fence was in place, but is broke and laying in front of NE barrel.

Alert Code 1: 2' X 2' scour on top by west headwall.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-122-09.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03006 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 E 2 N GLEN ULLIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	24.495	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 39' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	297795.9 5191794.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1947 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	November 20, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X10X62' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-122-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	125	0	0	96	120	4	5	0	0
1080/3:Delamination/Spall/Patched Area	ft	5	0	0	0	0	100	5	0	0
1130/3:Cracking (RC and Other)	ft	120	0	0	100	120	0	0	0	0
8401/3:Wings	each	4	0	0	75	3	0	0	25	1
1130/3:Cracking (RC and Other)	each	4	0	0	75	3	0	0	25	1
8402/2:Headwalls	each	2	0	0	100	2	0	0	0	0

Remarks: 11/20/18- Fill loss of 1' West wall and 3' to 5' on East wall. Fill loss both exterior walls 2' to 5' with material in both boxes. Minor cracks throughout culvert. W barrel roof has 1'x 1' spall on roof, steel exposed.

Alert Code 1: Construction joints open 1 3/4", material loss on sides one to 5' now, east joint. a large amount of material now in barrels by joints.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-123-14.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03020 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE AREA	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 4 NORTH OF ALMONT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.598	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 46' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 37' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	299019.7 5184144.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	72 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 20, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBRS-3020(55) SITE 2
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X8X102' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-123-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	203	99	200	2	3	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/2:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: 11/20/18- A spall 1'x 8" at the bottom of the center wall south end. Sw wing has a small hairline crack. Ne wing has 3 hairline cracks each one about 3' long.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-126-16.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03020 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BIG MUDDY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 2 NORTH OF ALMONT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	13.197	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 45' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 33' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	305023.5 5180817.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 31 57 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1987 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	72 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	November 20, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	44 Ft.	Other Special	N
49 Structure Length	111.88 Ft.	218 Channel Profile	Y 48 05/23/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.2 Ft.	213 Federal Aid Project Number	CBRS-3020(52)
52 Deck Width	31.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-126-16.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,509	100	3,509	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	449	100	449	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	62	100	62	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	223	100	223	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	223	100	223	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-126-19.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	38.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE AREA	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH 2 WEST OF ALMONT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 42' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 33' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	304995.8 5176565.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 7 12 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 3 6 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	207 Gravel/Dirt	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1936 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	5 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	124 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 05, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.0 Ft.	Other Special	N
48 Length of Max Span	26 Ft.	218 Channel Profile	Y 48 06/02/2016
49 Structure Length	27.89 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	19.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-126-19.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/2:Timber Deck	sq.ft	570	100	570	0	0	0	0	0	0
111/2:Timber Open Girder	ft	390	0	0	94	365	6	25	0	0
1150/2:Check/Shake	ft	25	0	0	0	0	100	25	0	0
1180/2:Abrasion	ft	365	0	0	100	365	0	0	0	0
206/3:Timber Column	each	10	0	0	50	5	30	3	20	2
1140/3:Decay/Section Loss	each	2	0	0	0	0	0	0	100	2
1180/3:Abrasion	each	5	0	0	100	5	0	0	0	0
1900/3:Distortion	each	3	0	0	0	0	100	3	0	0
216/3:Timber Abutment	ft	39	49	19	51	20	0	0	0	0
4000/3:Settlement	ft	20	0	0	100	20	0	0	0	0
235/2:Timber Pier Cap	ft	49	100	49	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	56	0	0	100	56	0	0	0	0
1180/2:Abrasion	ft	56	0	0	122	56	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1900/3:Distortion	each	4	0	0	100	4	0	0	0	0

Remarks: 11/5/18 - South abutment sounds hollow 0-5' up. 3" of undermining. Fence under structure across west opening. Steep and narrow inslopes at bridge ends. South abutment bowing slightly just at pile. Both abuts have some fill loss. South backwall backing plank exposed due to minor scour only 3" up from bottom. South wall undermined. NW wing leaning, SW wing pulled away from pile, SE wing has a broken top plank.

Alert Code 2: Scour at south abutment causing fill loss from behind abutment. Fill from back side of south abutment is now pushing on abutment and cracking timber columns. 01/19/17 - 2 of the 5 columns (w1&w2) are showing extensive decay which may affect the load capacity of the colum and SW & NE hazard markers missing.

Structure Number: 30-127-16.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03020 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BIG MUDDY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 1 NORTH OF ALMONT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	14.197	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 44' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 32' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	305761.4 5180217.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 26 48 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1984 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	72 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	November 06, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	105.97 Ft.	218 Channel Profile	Y 48 05/23/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.5 Ft.	213 Federal Aid Project Number	BRO-30(9)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Demaree
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-127-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,455	100	3,455	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	423	100	423	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	66	100	66	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	213	100	213	0	0	0	0	0	0
333/2:Other Bridge Railing	ft	213	100	213	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/6/18- Minor erosion NW end by pier 2.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-128-12.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03027 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MUSKRAT CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 NORTH OF ALMONT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	12.498	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 30' 40.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	308411.8 5187106.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1999 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	155 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	November 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRC-3027(53)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, McCloud
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X10X68' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-128-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	136	100	136	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8402/2:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: 11/7/18- Spall east wing. All sections show 1" gaps after asssembly. Large spall on east center wing. All sections show 1" gaps. EROSION ON SLOPE BY SW WING. SW end of barrel plugged with 1' of sediment.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-128-15.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03027 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HAIL STORM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH OF ALMONT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	9.798	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 46' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 30' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	308374.2 5182498.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 31 58 Tons
208 Dk Overburden	302 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1989 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	321 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	1 0 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.6 Ft.	Underwater	N
48 Length of Max Span	36 Ft.	Other Special	N
49 Structure Length	98.10 Ft.	218 Channel Profile	Y 48 05/23/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	27.9 Ft.	213 Federal Aid Project Number	CBRS-3027(52)
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, McCloud
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-128-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,035	100	3,035	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	390	100	390	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	62	100	62	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	197	100	197	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	197	100	197	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-128-18.0

200 System Designation	2 – County On	Classification	
201 Status	Not Applicable	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03027 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BIG MUDDY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	CITY OF ALMONT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	6.499	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 30' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	308221.4 5177475.8	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 26 47 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 20 36 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	350 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	9 Above Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	32 Ft.	90 Date of Last Inspection	November 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	32.0 Ft.	Underwater	N
48 Length of Max Span	65 Ft.	Other Special	N
49 Structure Length	172.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	32.0 Ft.	213 Federal Aid Project Number	BRC-3027(054)
52 Deck Width	34.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-128-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	6,072	100	6,072	0	0	0	0	0	0
520/3:Conc Re Prot Sys	sq.ft	6,072	100	6,072	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	855	100	855	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	69	100	69	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	69	100	69	0	0	0	0	0	0
301/3:Pourable Joint Seal	ft	69	100	69	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	352	100	352	0	0	0	0	0	0
520/3:Conc Re Prot Sys	sq.ft	352	100	352	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: New bridge 2019_ - 11/13/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-128-18.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	80.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF ALMONT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 31' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	306698.3 5176921.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 21 38 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 13 24 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1975 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	85 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	8 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 05, 2018
32 Approach Roadway Width	30 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	Y 48 06/02/2016
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	26.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 30-128-18.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	217	100	217	0	0	0	0	0	0
206/3:Timber Column	each	14	93	13	7	1	0	0	0	0
1180/3:Abrasion	each	1	0	0	100	1	0	0	0	0
216/3:Timber Abutment	ft	39	100	39	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	49	100	49	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	62	100	62	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
1170/3:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0

Remarks: 11/5/17- S pile east abut scuffed by ice. 2" gravel on deck. Poor channel alignment. NW wing plank broken.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-128-18.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	78.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF ALMONT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 31' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	307129.5 5176865.7	Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 20 37 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 12 23 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1975 106 Yr Reconstructed	-1	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	95 30 Year of ADT	2018	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	November 05, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	Y 48 06/02/2016
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	26.6 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	28.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 30-128-18.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	223	100	223	0	0	0	0	0	0
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	39	100	39	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	49	100	49	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	66	100	66	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	66	100	66	0	0	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0

Remarks: 11/5/18- Old pile in channel causing scour by se wing. 1.5' deep by 12'x10'. Broken plank top of SW and SE wings.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-128-19.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03027 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE AREA	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF ALMONT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	6.299	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 42' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 30' 40.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	308076.6 5176655.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 27 50 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 30 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	204 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	110 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	5 Miles	113 Scour Critical	3 SC - Unstable
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 15, 2018
32 Approach Roadway Width	30 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	Y 48 06/02/2016
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/28/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	S-472(9)
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-128-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	249	100	249	0	0	0	0	0	0
206/3:Timber Column	each	10	0	0	100	10	0	0	0	0
1180/3:Abrasion	each	10	0	0	100	10	0	0	0	0
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	62	100	62	0	0	0	0	0	0
8401/2:Wings	each	4	50	2	50	2	0	0	0	0
7000/2:Damage	each	2	0	0	100	2	0	0	0	0

Remarks: 5/15/18- Some decay of pile at water line. Minor ice damage to nw pile. Minimal section loss. Minor erosion starting behind SE wing.

Alert Code 1: 5/15/18- Planks of the NE & NW wings are moving inward towards channel because they are not tied back.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-129-14.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SIMMS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH 4 WEST NEW SALEM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 46' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 29' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	309334.3 5183220.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 40 73 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1997 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DPI 0036(003)301
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Demaree
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X10X102' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-129-14.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	203	100	203	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/2:Headwalls	each	2	100	2	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-129-18.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03020 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HAIL STORM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST OF ALMONT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	17.096	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 29' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	309712.9 5176892.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 52 95 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	130 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	7 Miles	36 Traffic Safety Features	0 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	November 06, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	39 Ft.	Other Special	N
49 Structure Length	124.02 Ft.	218 Channel Profile	Y 48 05/19/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.5 Ft.	213 Federal Aid Project Number	CBRS-3020(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, McCloud
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-129-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,026	100	4,026	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	495	100	495	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	66	100	66	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	249	100	249	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/6/18- Many cracks visable under span #3. Some cracks on span #2 and just 2 on span #1 with efflorescence visible. 15' diameter by 3' deep erosion hole on se slope protection .Also 20' diameter by 7' deep erosion NW ditch by structure.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-129-18.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	38.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BIG MUDDY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST OF ALMONT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 29' 37.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	309442.7 5176786.4	Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 5 9 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 2 5 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden 1	None	209 Posted in "Tons"	05 Tons
Age and Service		Appraisal	
27 Yr Built 1940 106 Yr Reconstructed	2002	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT 5 30 Year of ADT	2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	124 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 06, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.0 Ft.	Other Special	N
48 Length of Max Span	39 Ft.	218 Channel Profile	Y 48 05/19/2016
49 Structure Length	94.16 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	19.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, McCloud
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-129-18.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,884	100	1,884	0	0	0	0	0	0
111/2:Timber Open Girder	ft	1,033	0	0	97	1,000	3	33	0	0
1020/2:Connection	ft	33	0	0	0	0	100	33	0	0
1180/2:Abrasion	ft	1,000	0	0	100	1,000	0	0	0	0
206/2:Timber Column	each	11	46	5	55	6	0	0	0	0
1170/2:Split/Delamination (Timber)	each	6	0	0	100	6	0	0	0	0
216/2:Timber Abutment	ft	43	54	23	47	20	0	0	0	0
1180/2:Abrasion	ft	20	0	0	100	20	0	0	0	0
231/3:Steel Pier Cap	ft	43	0	0	100	43	0	0	0	0
1000/3:Corrosion	ft	43	0	0	100	43	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3420/3:Peel/Bub/Crack(Stl Protect Co	sq.ft	100	0	0	0	0	100	100	0	0
235/2:Timber Pier Cap	ft	43	0	0	100	43	0	0	0	0
1180/2:Abrasion	ft	43	0	0	100	43	0	0	0	0
332/3:Timb Bridge Railing	ft	187	100	187	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	50	2	50	2	0	0	0	0
6000/2:Scour	each	2	0	0	100	2	0	0	0	0

Remarks: 11/6/18- S-5 has no bearing on Pier 2. Deck is overlaid with 12"x7" timbers entire length of structure. Center of deck. Poor roadway alignment both directions due to horizontal curves. NW bank is eroding some. continued river bank erosion downstream.

Alert Code 2: 11/6/18 - The NW corner of the River bank is now eroded to be 10 feet from the edge of the road near the bridge. Tree roots are all that's holding the remaining fill from being eroded from behind the NW wing. Poor channel alignment downstream is causing severe erosion around structure during periods of high water flows.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-130-20.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BIG MUDDY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 3 SOUTH OF ALMONT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 41' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 28' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	311333.0 5174128.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	—	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 28 52 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1999 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 05, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	137.14 Ft.	218 Channel Profile	Y 48 05/19/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	31.2 Ft.	213 Federal Aid Project Number	DPI-0036(005)301
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-130-20.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,273	100	4,273	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	548	100	548	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	56	100	56	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	276	100	276	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-132-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BIG MUDDY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 3 SOUTH OF ALMONT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 40' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 26' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	313551.1 5172474.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1975 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	November 05, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	125.98 Ft.	218 Channel Profile	Y 48 05/19/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.2 Ft.	213 Federal Aid Project Number	ROS-972(1)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-132-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	1,007	100	1,007	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	59	95	56	5	3	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
215/2:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	253	100	253	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	253	100	253	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/5/18- Hairline cracks on abutment and pier are very small and hardly visible. Spalling on sw wing where beams and wing meet. Poor roadway alignment from east due to horizontal curve. Minor spalls on diaphragms of pier 3. And a small 8" x 8" spall south beam span 1.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-133-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	24.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWEET BRIAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 NORTH OF NEW SALEM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 24' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	316738.6 5201659.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	3 Serious
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	0 Field eval and docs
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 2 5 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	0 Field eval and docs
Membrane	0 None	66 Inv. Rating	HS 2 4 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	5 Tons
Age and Service		Appraisal	
27 Yr Built	1922 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 11, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 09/11/2019
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.7 Ft.	Other Special	N
48 Length of Max Span	67 Ft.	218 Channel Profile	Y 48 05/17/2016
49 Structure Length	70.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	09/26/2019
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-133-03.0

Structure Number: 30-133-03.0

[illegible]

Structure Number: 30-133-03.0

Notes:no coating - 9/11/2019										
331/3:Re Conc Bridge Railing	ft	141	0	0	100	141	0	0	0	0
1130/3:Cracking (RC and Other)	ft	141	0	0	100	141	0	0	0	0
Notes:curb has cracking thru out - 9/11/2019										
7357/3:Pack Rust	each	1	0	0	0	100	1	0	0	0
7362/1:Superstructure Traffic Impact	each	1	0	0	0	100	1	0	0	0
8401/3:Wings	each	4	0	0	75	3	0	0	25	1
1080/3:Delamination/Spall/Patched Area	each	1	0	0	0	0	0	0	100	1
Notes:SW wing - 9/11/2019										
1130/3:Cracking (RC and Other)	each	3	0	0	100	3	0	0	0	0
Notes:NW, NE, SE wings have cracking with delamination/ scaling - 9/11/2019										

Remarks: Fracture critical inspection. Pack rust forming and starting to bend gusset plates. None are loose yet, and no rivets have failed. Gravel on bottom chord from blade creating moist environment. Fracture critical inspection shows pack rust on bottom chord gusset plates north end both sides. North abutment has advanced scaling at water line with rebar exposed. E corner N abut has 4' hole at corner 3' above waterline. - 9/11/2019

Alert Code 1: moderate rust evident with 10- 20% section loss @ small areas including bottom chord at corners both trusses. - 9/11/2019

Alert Code 2: Vehicle damage has occurred to the west side of the truss. The vertical members at I3 and I4 are bent. Ne corner of N abut has advanced scaling section loss 3'x 3 the rest of the backwall entire width has 6" to 1' loss. South abutment has advanced scaling section loss 3' x 2' NW corner. Concrete is like gravel. - 9/11/2019

Alert Code 3: Underside of deck has significant spalling with exposed rebar and significant section loss at floor beams. Other areas between the floor beams have the same spalling conditions. Large spalls @ NW,NE & SE corners of abutments under bearings. The diagonal from I2 to U3 is bent and U3 to L4 is broken off. - 9/11/2019

Critical Finding Diagonal member from U3 to L4 is broke off. Rating of bridge should be looked at. - 9/11/2019

Fracture Critical: Diagonal member from U3 to L4 is broke off. The vertical members at I3 and I4 are bent - 9/11/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-133-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	55.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE AREA	102 Direction of Traffic	2 2-way traffic
09 Location	5 NORTH OF NEW SALEM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 24' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	316664.4 5198200.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 19 34 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 11 21 Tons
Dk Protect	None	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	14 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	10 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 14, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	20.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.1 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	Y 48 05/18/2016
49 Structure Length	36.09 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	02/06/2017
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 30-133-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	657	0	0	0	0	99	653	1	4
1080/2:Delamination/Spall/Patched Area	sq.ft	657	0	0	0	0	583	653	4	4
107/1:Steel Opn Girder/Beam	ft	289	0	0	100	289	0	0	0	0
1000/1:Corrosion	ft	289	0	0	100	289	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
215/3:Re Conc Abutment	ft	36	0	0	0	0	83	30	17	6
1080/3:Delamination/Spall/Patched Area	ft	6	0	0	0	0	0	0	100	6
1190/3:Abrasion(PSC/RC)	ft	30	0	0	0	0	100	30	0	0
330/2:Metal Bridge Railing	ft	72	0	0	0	0	72	52	28	20
1900/2:Distortion	ft	52	0	0	0	0	100	52	0	0
7000/2:Damage	ft	20	0	0	0	0	0	0	100	20
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
331/2:Re Conc Bridge Railing	ft	72	0	0	50	36	36	26	14	10
1080/2:Delamination/Spall/Patched Area	ft	62	0	0	58	36	42	26	0	0
7000/2:Damage	ft	10	0	0	0	0	0	0	100	10
7363/1:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	0	0	100	4	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	0	0	100	4	0	0

Remarks: 5/14/18 - Wings and abutment tips show large delams. Rail bent from wide loads. Bearing of rail post spalling. Concrete in deck & abutments showing some minor deterioration. Steel exposed bottom of deck showing section loss. Three 2' X 2' spalls on bottom of deck. South abutment showing spalls and deterioration at water line with rebar exposed. A large tree stuck in what is left of fence under structure. Bottom of deck has several areas of honeycomb.

Alert Code 2: 5/14/18- A 3'x 1'hole in deck west side,4' of curb also missing.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-133-05.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH OF NEW SALEM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 25' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	315526.2 5197492.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 46 83 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 27 50 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	Tons
Age and Service		Appraisal	
27 Yr Built	1972 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	15 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 14, 2018
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.6 Ft.	Other Special	N
48 Length of Max Span	27 Ft.	218 Channel Profile	Y 48 05/18/2016
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.3 Ft Lt-Side	212 Structure Load Rated	02/06/2017
51 Bridge Rdwy Width - Curb to Curb	23.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 30-133-05.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	732	100	732	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	509	0	0	100	509	0	0	0	0
1000/2:Corrosion	ft	509	0	0	100	509	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
206/3:Timber Column	each	12	92	11	8	1	0	0	0	0
1150/3:Check/Shake	each	1	0	0	100	1	0	0	0	0
216/3:Timber Abutment	ft	49	90	44	10	5	0	0	0	0
1900/3:Distortion	ft	5	0	0	100	5	0	0	0	0
235/2:Timber Pier Cap	ft	49	100	49	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	59	49	29	51	30	0	0	0	0
1180/2:Abrasion	ft	30	0	0	100	30	0	0	0	0
8401/3:Wings	each	4	0	0	75	3	25	1	0	0
1180/3:Abrasion	each	3	0	0	100	3	0	0	0	0
1900/3:Distortion	each	1	0	0	0	0	100	1	0	0

Remarks: 5/14/18- All wings have loose planks. LOOSE PLANK NE WING. EROSION BEHIND NE & NW WINGS. N END OF WEST PILE CAP TWISTED 1" WESTWARD. NE & NW wings leaning inward with top planks pulling away from columns.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-134-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	On Base Network
202 Sufficiency Rating	79.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Minor Arterial
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE AREA	102 Direction of Traffic	2 2-way traffic
09 Location	7 NORTH 1 EAST NEW SALEM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	0000000000 00	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 23' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	317461.4 5202257.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 25 45 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 11 21 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	201 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1970 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	60 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	10 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 14, 2018
32 Approach Roadway Width	28 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	25.6 Ft.	Other Special	N
48 Length of Max Span	37 Ft.	218 Channel Profile	Y 48 05/17/2016
49 Structure Length	40.03 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	25.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-134-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	361	100	361	0	0	0	0	0	0
206/3:Timber Column	each	16	75	12	25	4	0	0	0	0
7000/3:Damage	each	4	0	0	100	4	0	0	0	0
216/3:Timber Abutment	ft	66	96	63	5	3	0	0	0	0
7000/3:Damage	ft	3	0	0	100	3	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	79	0	0	100	79	0	0	0	0
1900/2:Distortion	ft	79	0	0	100	79	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
331/2:Re Conc Bridge Railing	ft	79	100	79	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
1180/3:Abrasion	each	2	0	0	100	2	0	0	0	0

Remarks: 5/14/18- Ice damage NE abutment. Some insignificant markings on two north piling both abutments and two backing plank ne corner from ice.North & south bridgerail damaged. Planking of both north wings are pulling away from piling. Two spalls & hairline cracking starting to show on girder S1. S2 & S3 PILE ON EAST ABUTMENT SHOWS ICE DAMAGE WITH MINOR SECTION LOSS.

Alert Code 1: 5/14/18- Some very Minor scour under structure. NW & SE end markers missing.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-134-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	42.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWEET BRIAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH 1 EAST NEW SALEM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 23' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	317792.2 5200636.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 11 20 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 7 13 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	12 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	5 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 15, 2018
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	Y 48 05/18/2016
49 Structure Length	59.06 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-134-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,421	0	0	100	1,421	0	0	0	0
1180/1:Abrasion	sq.ft	1,421	0	0	100	1,421	0	0	0	0
111/2:Timber Open Girder	ft	886	0	0	92	814	3	24	5	48
1020/2:Connection	ft	24	0	0	0	0	100	24	0	0
1160/2:Crack (Timber)	ft	48	0	0	0	0	0	0	100	48
1180/2:Abrasion	ft	814	0	0	100	814	0	0	0	0
206/3:Timber Column	each	18	0	0	89	16	6	1	6	1
1150/3:Check/Shake	each	1	0	0	0	0	100	1	0	0
1180/3:Abrasion	each	16	0	0	100	16	0	0	0	0
7000/3:Damage	each	1	0	0	0	0	0	0	100	1
216/3:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
1900/3:Distortion	ft	52	0	0	100	52	0	0	0	0
235/2:Timber Pier Cap	ft	82	0	0	88	72	12	10	0	0
1180/2:Abrasion	ft	72	0	0	100	72	0	0	0	0
1900/2:Distortion	ft	10	0	0	0	0	100	10	0	0
332/2:Timb Bridge Railing	ft	118	0	0	25	30	0	0	75	88
1140/2:Decay/Section Loss	ft	30	0	0	100	30	0	0	0	0
7000/2:Damage	ft	88	0	0	0	0	0	0	100	88
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1900/3:Distortion	each	4	0	0	100	4	0	0	0	0

Remarks: 5/15/18- SE & NW end markers missing. North bridge rail tipped out because it is attached to the north stringer. The displacement of the north girder has created a hump in the deck on the north side on top of pier 2. 7 ft of north bridge rail missing.

Alert Code 1: 5/15/18- North stringer tipped . 1 fractured & 1 cracked stringer in span 2. old piling in channel along east backwall causing some minor scour in channel. Bottom 4 inches missing from N8 beam. N4 beam has horizontal crack entire length 4 inches from top. East end cap rotating on south 3 pile and is onlt touching about 3" of pile. N column on west abutment is fractured and carrying no load.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-135-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWEET BRIAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 5 NORTH NEW SALEM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 21' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	319887.5 5198175.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 33 60 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 15 28 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1970 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	15 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 15, 2018
32 Approach Roadway Width	23 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	21.0 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	Y 48 05/18/2016
49 Structure Length	86.94 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	21.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-135-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	610	100	610	0	0	0	0	0	0
205/3:Re Conc Column	each	4	100	4	0	0	0	0	0	0
206/3:Timber Column	each	12	100	12	0	0	0	0	0	0
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	95	0	0	100	95	0	0	0	0
330/2:Metal Bridge Railing	ft	174	0	0	99	172	0	0	1	2
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	174	0	0	99	172	0	0	1	2
8401/3:Wings	each	4	50	2	50	2	0	0	0	0

Remarks: 5/15/18- S pier X bracing bent. W beam not snug to adjacent member, bolts in place, middle span only. W 1 Beam gap 1". W Beam gap 2". Cross bracing on south pier bent slightly. Recent highwater has uncovered the south backwall plank. Gap between W & W1 is now 2". Gap between W1 & W2 is now 1". Scour beside both abutments causing minor fill loss. VEHICLE DAMAGE TO SOUTH 2' OF WEST BRIDGERAIL AND CURB.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-135-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	67.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 SOUTH 2 EAST NEW SALEM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 44' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 22' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	318778.9 5179698.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 12 22 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 8 15 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	14 Tons
Age and Service		Appraisal	
27 Yr Built	1970 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	10 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	8 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 15, 2018
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	Y 48 05/19/2016
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-135-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	614	100	614	0	0	0	0	0	0
111/2:Timber Open Girder	ft	426	94	400	6	26	0	0	0	0
1180/2:Abrasion	ft	26	0	0	100	26	0	0	0	0
206/2:Timber Column	each	12	0	0	100	12	0	0	0	0
1180/2:Abrasion	each	12	0	0	100	12	0	0	0	0
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
332/3:Timb Bridge Railing	ft	49	51	25	35	17	0	0	14	7
1140/3:Decay/Section Loss	ft	7	0	0	0	0	0	0	100	7
1180/3:Abrasion	ft	17	0	0	100	17	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 5/15/18- Some staining of piling at water line. Top plank on SE wing pulled 3" away from abutment. Fill loss is starting.

Alert Code 1: 5/15/18- Scour under structure along west abutment 2' x12' x 24'. loosing backfill behind SW wing. 6' of south rail is rotted thru

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-136-19.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03020 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 SOUTH 2 EAST NEW SALEM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	24.295	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 42' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 21' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	319753.8 5174838.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 34 61 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 15 29 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1970 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	78 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	May 15, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.2 Ft.	Underwater	N
48 Length of Max Span	34 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	Y 48 05/19/2016
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	30.5 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	31.8 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-136-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	361	0	0	97	351	3	10	0	0
1080/1:Delamination/Spall/Patched Area	ft	10	0	0	0	0	100	10	0	0
1090/1:Exposed Rebar	ft	351	0	0	100	351	0	0	0	0
206/3:Timber Column	each	16	0	0	100	16	0	0	0	0
1180/3:Abrasion	each	16	0	0	100	16	0	0	0	0
216/3:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3410/1:Chalk(Steel Protect Coatings)	sq.ft	100	0	0	100	100	0	0	0	0
331/3:Re Conc Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1900/3:Distortion	each	4	0	0	100	4	0	0	0	0

Remarks: 5/15/18- SW END MARKER LOOSE FROM POST. First pile on NE wing pulled 3½" away from planks. Spall with exposed rebar on bottom side of deck no section loss yet.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-137-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWEET BRIAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 4 NORTH OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 19' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	322941.7 5195753.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 30 55 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	55 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 18, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	42 Ft.	Other Special	N
49 Structure Length	138.12 Ft.	218 Channel Profile	Y 48 05/18/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	BRO-30(13)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-137-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,445	100	4,445	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	551	100	551	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	66	100	66	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	276	96	264	4	12	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
6000/2:Scour	each	1	0	0	100	1	0	0	0	0

Remarks: Minor cracks where abuts meet breastwalls. Hairline cracks on top & bottom of deck. 10/2010 - NUMEROUS SPALLS ON WEST BRIDGERAIL. Half backfill washed away from N/W wing wall

Alert Code 1: 10/2010 - ,EROSION BY NW WING 3'X 6'X 6' DEEP.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-137-11.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	59.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 2 WEST OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 19' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	322870.3 5189165.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 14 25 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 8 16 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	204 Gravel/Dirt	209 Posted in "Tons"	14 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed	2005	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	2018	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	April 18, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.3 Ft.	Underwater	N
48 Length of Max Span	26 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	Y 48 05/18/2016
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	24.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-137-11.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	710	100	710	0	0	0	0	0	0
111/1:Timber Open Girder	ft	435	74	322	26	113	0	0	0	0
1180/1:Abrasion	ft	435	74	322	26	113	0	0	0	0
206/3:Timber Column	each	12	0	0	92	11	8	1	0	0
1900/3:Distortion	each	24	50	12	46	11	4	1	0	0
216/3:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
1170/3:Split/Delamination (Timber)	ft	52	0	0	100	52	0	0	0	0
235/1:Timber Pier Cap	ft	52	46	24	54	28	0	0	0	0
1140/1:Decay/Section Loss	ft	52	46	24	54	28	0	0	0	0
332/2:Timb Bridge Railing	ft	59	49	29	51	30	0	0	0	0
1140/2:Decay/Section Loss	ft	59	49	29	51	30	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1900/3:Distortion	each	4	0	0	100	4	0	0	0	0

Remarks: Pile W on south abutment has bearing loss due to the twisted pier cap Ne & sw end markers missing.. West 6' of south pier cap is twisted resulting in 50% bearing loss is pile W.

Alert Code 1: 11/2010 - NE & SW END MARKER MISSING. WEST BRIDGERAIL LOOSE. .

Alert Code 2: Scour along s abut is about 4' deep & 6' wide.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-138-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	76.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE AREA	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 1 WEST OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 52' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 18' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	324406.1 5193996.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 16 30 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 11 20 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	18 Tons
Age and Service		Appraisal	
27 Yr Built	1919 106 Yr Reconstructed	1970	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT	2018	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	April 18, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.3 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	Y 48 05/18/2016
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 30-138-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	603	0	0	100	603	0	0	0	0
1180/1:Abrasion	sq.ft	603	0	0	100	603	0	0	0	0
111/1:Timber Open Girder	ft	427	0	0	100	427	0	0	0	0
1140/1:Decay/Section Loss	ft	427	0	0	100	427	0	0	0	0
206/3:Timber Column	each	12	0	0	100	12	0	0	0	0
1180/3:Abrasion	each	12	0	0	100	12	0	0	0	0
216/3:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
1180/3:Abrasion	ft	52	0	0	100	52	0	0	0	0
235/1:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	49	0	0	0	0	0	0	100	49
7000/1:Damage	ft	49	0	0	0	0	0	0	100	49
8401/3:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: One pile se wing split. Sight distance poor from both directions due to horizontal curves.NW & SE end markers are missing. Beaver dam 150' upstream. Bridge rail missing both sides. Debris caught up on east backwall by top of cap.

Alert Code 1: Dirt on sills of caps. Piling 2,3 & 5 from the north are not touching the peir cap by about 1". Piling 1,4, & 6 from the north are carrying the load.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-139-07.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03039 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWEET BRIAR	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	34.393	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 52' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 16' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	326173.5 5194374.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	230 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	1 0 0 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 18, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	86 Ft.	Other Special	N
49 Structure Length	89.90 Ft.	218 Channel Profile	Y 48 05/18/2016
50 Curb/Sidewalk Widths	4.9 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.5 Ft.	213 Federal Aid Project Number	AHL-3039(52)
52 Deck Width	36.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-139-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,240	100	3,240	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	541	100	541	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	72	81	58	19	14	0	0	0	0
6000/3:Scour	ft	14	0	0	100	14	0	0	0	0
330/2:Metal Bridge Railing	ft	89	100	89	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	180	100	180	0	0	0	0	0	0
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Washing by nw wing. 10/2010 - SMALL SPALL ON N ABUTMENT UNDER 3RD BEAM FROM EAST.MINOR HAIRLINE CRACKS UNDERSIDE OF DECK WITH EFFLORESCENCE. 05/2014 - Minor scour under south abutment. 6"X2' exposed. 10/26/2016 - South abutment now has minor scour 6" x 12' one pile exposed. North abutment has 6" x 2' scour one pile exposed. COUNTY MAINTENANCE: Guardrail appears to be too low and needs to be cleaned out below it.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-139-12.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03039 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	29.593	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 16' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	325984.7 5186593.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 30 55 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 33 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1962 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	150 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	11 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 18, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	Y 48 05/18/2016
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/28/2017
	24.3 Ft.	213 Federal Aid Project Number	CS-731(6)
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 30-139-12.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	249	95	237	5	12	0	0	0	0
1090/1:Exposed Rebar	ft	12	0	0	100	12	0	0	0	0
206/3:Timber Column	each	12	75	9	25	3	0	0	0	0
7000/3:Damage	each	3	0	0	100	3	0	0	0	0
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	62	90	56	7	4	0	0	3	2
1140/1:Decay/Section Loss	ft	4	0	0	100	4	0	0	0	0
7000/1:Damage	ft	2	0	0	0	0	0	0	100	2
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Ne wing has some washing by it. A beaver dam 150' down- stream, backing up water under bridge. 12/2010 - MINOR ICE DAMAGE TO NW WING PILE & WEST PILE NORTH ABUTMENT. 10/26/2016 - North Post on West bridge rail broke at bottom and missing.

Alert Code 1: Scour near n abut minor in nature. 12'of spalls on girders with rebar exposed no section loss.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-140-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	49.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 8 Service R	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	AT JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 40.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 16' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	326056.7 5188539.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 11 20 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 7 13 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	12 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	10 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	1 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 18, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.0 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	Y 48 05/18/2016
49 Structure Length	78.08 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	19.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-140-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,572	0	0	0	0	99	1,550	1	22
1140/1:Decay/Section Loss	sq.ft	1,572	0	0	0	0	99	1,550	1	22
111/2:Timber Open Girder	ft	1,014	0	0	81	818	19	196	0	0
1150/2:Check/Shake	ft	818	0	0	100	818	0	0	0	0
1160/2:Crack (Timber)	ft	196	0	0	0	0	100	196	0	0
206/3:Timber Column	each	20	0	0	100	20	0	0	0	0
1150/3:Check/Shake	each	20	0	0	100	20	0	0	0	0
216/3:Timber Abutment	ft	46	50	23	50	23	0	0	0	0
1150/3:Check/Shake	ft	23	0	0	100	23	0	0	0	0
235/2:Timber Pier Cap	ft	92	0	0	100	92	0	0	0	0
1150/2:Check/Shake	ft	92	0	0	100	92	0	0	0	0
332/2:Timb Bridge Railing	ft	147	0	0	93	137	7	10	0	0
1140/2:Decay/Section Loss	ft	147	0	0	93	137	7	10	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1140/3:Decay/Section Loss	each	4	0	0	100	4	0	0	0	0

Remarks: NO END MARKERS. SOIL ON PIER CAPS. ADDITIONAL PLANK INSTALLED AS A SILL ON PIER CAPS. COLLECTING DIRT. FENCE ACROSS S OPENING UNDER BRIDGE. ALL TIMBER SHOWING WEATHERING & CHECKING. . 2 STRINGERS IN THE MIDDLE OF MIDDLE SPAN,S6 & S7 HAVE A CRACK IN THE MIDDLE OF THE BEAMS BUT ARE NOT FRACTURED. NEW SHOTS TAKEN SEE ATTACHED SHEET. WILL MONITOR. 10/27/2016 - Fence and Gate across west end. It appears bus no longer travels on bridge. East pier cap is rotating resulting in bearing loss in all 5 pile. 20' of bridge rail @NW corner is not attached to rail post. 4/18/2018: Numerous nails puching out of deck boards. 22 Deck boards have been replaced.

Alert Code 1: Shots taken at piers to check for settlement.land owner said sw corner got worse,buss drives on bridge.

Alert Code 2: 10/27/2016 - There are numerous deck boards that are rotted to the point, they sag when walked on.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 30-140-11.2

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	78.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03039 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	AT JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	30.893	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 16' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	326111.2 5188576.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 27 49 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 12 22 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	302 Asphalt	209 Posted in "Tons"	14 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	295 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 18, 2018
32 Approach Roadway Width	27 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	30.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.2 Ft.	Other Special	N
48 Length of Max Span	43 Ft.	218 Channel Profile	Y 48 05/18/2016
49 Structure Length	44.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	213 Federal Aid Project Number	CS-731(6)
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-140-11.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	449	100	449	0	0	0	0	0	0
206/3:Timber Column	each	14	86	12	14	2	0	0	0	0
1140/3:Decay/Section Loss	each	2	0	0	100	2	0	0	0	0
216/3:Timber Abutment	ft	72	50	36	50	36	0	0	0	0
1140/3:Decay/Section Loss	ft	36	0	0	100	36	0	0	0	0
235/1:Timber Pier Cap	ft	72	100	72	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	89	100	89	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 1/12/97 - No deck just beams with asphalt wearing surface. Some staining on piling at water line.

Alert Code 1: 12/17/2012: South Side of bridge has 2'-3" roadway settlement causing ramping onto bridge. Fill loss from south abutment. South abutment leaning inward 3" in 4'. 05/2014 - Both load limit signs missing.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-141-09.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03006 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWEET BRIAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 2 EAST OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	43.491	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 15' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	328228.3 5191090.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 37 67 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 22 40 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	305 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1964 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	405 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	1 0 1 1
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 18, 2018
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	32.2 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	Y 48 05/18/2016
49 Structure Length	63.98 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	32.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	37.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-141-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,368	100	2,368	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	2,368	100	2,368	0	0	0	0	0	0
110/2:Re Conc Opn Girder/Beam	ft	449	100	449	0	0	0	0	0	0
205/3:Re Conc Column	each	3	0	0	67	2	33	1	0	0
1080/3:Delamination/Spall/Patched Area	each	3	0	0	67	2	33	1	0	0
215/3:Re Conc Abutment	ft	75	0	0	100	75	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	75	0	0	100	75	0	0	0	0
234/3:Re Conc Pier Cap	ft	36	0	0	92	33	8	3	0	0
1080/3:Delamination/Spall/Patched Area	ft	36	0	0	92	33	8	3	0	0
330/1:Metal Bridge Railing	ft	128	100	128	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	128	100	128	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0

Remarks: Spalling on piers @ waterline.Nw wing cracked. Spalling on both backwalls east side also cracked

Alert Code 2: 4/18/18: Erosion around the SW wing is encroaching on the roadway and has asphalt guardrail embankment.

Structure Number: 30-143-19.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03020 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HEART RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	9 SOUTH 3 EAST OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	31.494	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 42' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 12' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	330828.9 5174584.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel continuous	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 9 (H 10) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 25 45 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 15 27 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1945 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	78 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	1 0 0 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	April 17, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.3 Ft.	Underwater	N
48 Length of Max Span	107 Ft.	Other Special	Y 96 11/05/2012
49 Structure Length	232.94 Ft.	218 Channel Profile	Y 48 05/25/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	02/06/2017
	22.6 Ft.	213 Federal Aid Project Number	WER-12(A)
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 30-143-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	5,662	95	5,379	5	283	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	283	0	0	100	283	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	932	0	0	100	932	0	0	0	0
1000/2:Corrosion	ft	932	0	0	100	932	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
161/3:Stl Pin Pin/Han both	each	4	0	0	100	4	0	0	0	0
1000/3:Corrosion	each	4	0	0	100	4	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	49	92	45	8	4	0	0	0	0
1130/3:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
215/3:Re Conc Abutment	ft	49	80	39	20	10	0	0	0	0
1130/3:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
233/2:Pre Conc Pier Cap	ft	49	86	42	14	7	0	0	0	0
1110/2:Cracking (PSC)	ft	7	0	0	100	7	0	0	0	0
311/3:Moveable Bearing	each	4	100	4	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
313/2:Fixed Bearing	each	12	100	12	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	466	99	463	1	3	0	0	0	0
1020/1:Connection	ft	3	0	0	100	3	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	466	99	460	1	6	0	0	0	0
1130/3:Cracking (RC and Other)	ft	6	0	0	100	6	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/20/2012 - East expansion joint open 3/8" @ 30° F. West expansion joint open 3/4" @ 30° F. The pins were just inspected and have been repainted. 4/17/2018: Beams in center span are sagging. NW,SW,& SE end treatments and end terminals are too low. North metal bridge railing has a 1" wide by 1'one gouge in the rail from traffic damage. The south metal bridge railing has a 1" wide by 5' long gouge in it from traffic impact. The damage has no effect on the railings permformance. 10/26/16 - East 1/2" on South and 1/8" on north. West 1/2" on south and 3/8" on north @ 56 Degrees F.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-144-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	48.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 NORTH 5 EAST OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 27.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 10' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	333692.1 5195352.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 8 15 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 5 10 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	204 Gravel/Dirt	209 Posted in "Tons"	14 Tons
Age and Service		Appraisal	
27 Yr Built	1977 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	5 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 18, 2018
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	26 Ft.	218 Channel Profile	Y 48 05/17/2016
49 Structure Length	28.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-144-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	700	0	0	100	700	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	700	0	0	100	700	0	0	0	0
111/1:Timber Open Girder	ft	609	0	0	33	203	67	406	0	0
1160/1:Crack (Timber)	ft	609	0	0	33	203	67	406	0	0
206/2:Timber Column	each	12	8	1	67	8	25	3	0	0
1150/2:Check/Shake	each	8	0	0	100	8	0	0	0	0
1160/2:Crack (Timber)	each	3	0	0	0	0	100	3	0	0
216/2:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1180/2:Abrasion	ft	49	0	0	100	49	0	0	0	0
235/1:Timber Pier Cap	ft	49	51	25	37	18	12	6	0	0
1900/1:Distortion	ft	24	0	0	75	18	25	6	0	0
332/1:Timb Bridge Railing	ft	58	100	58	0	0	0	0	0	0
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
1140/2:Decay/Section Loss	each	4	0	0	100	4	0	0	0	0

Remarks: End markers installed but not properly implemented. north end shows little rotation. 10/27/16 - 4in. of overburden on deck

Alert Code 1: NW & SE End Markers missing.

Alert Code 2: East cap south end,beginning to rotate again,point loading on piles s,s1,s2.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-145-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	47.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 6 EAST OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 52' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 10' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	334573.1 5193790.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 11 20 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 7 13 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	18 Tons
Age and Service		Appraisal	
27 Yr Built	1936 106 Yr Reconstructed	1966	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	4 Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT	2018	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	15 Ft.	90 Date of Last Inspection	April 18, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.4 Ft.	Underwater	N
48 Length of Max Span	26 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	Y 48 05/17/2016
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	19.4 Ft.	212 Structure Load Rated	04/26/2012
52 Deck Width	20.3 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-145-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	581	0	0	100	581	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	581	0	0	100	581	0	0	0	0
111/1:Timber Open Girder	ft	407	0	0	93	378	7	29	0	0
1020/1:Connection	ft	29	0	0	0	0	100	29	0	0
1140/1:Decay/Section Loss	ft	378	0	0	100	378	0	0	0	0
206/3:Timber Column	each	10	20	2	60	6	10	1	10	1
1900/3:Distortion	each	8	0	0	75	6	13	1	13	1
216/3:Timber Abutment	ft	39	0	0	100	39	0	0	0	0
1140/3:Decay/Section Loss	ft	39	0	0	100	39	0	0	0	0
235/1:Timber Pier Cap	ft	43	0	0	100	43	0	0	0	0
1140/1:Decay/Section Loss	ft	43	0	0	100	43	0	0	0	0
332/3:Timb Bridge Railing	ft	59	0	0	100	59	0	0	0	0
1140/3:Decay/Section Loss	ft	59	0	0	100	59	0	0	0	0
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
1140/2:Decay/Section Loss	each	4	0	0	100	4	0	0	0	0

Remarks: 10/27/2016 - Both bridge rails replaced. No overburden on deck. Bridge is posted 7 ton per axel, 18 tons gross.
4/18/2018: North end of both pier caps have ice damage.

Alert Code 1: 05/2014 - North columns on both abutments cracked and showing distress. SE & NW end markers missing.
4/18/2018: North pile on west abutment has no bearing.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-145-09.0

200 System Designation	2 – County On	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	62.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03006 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 6 EAST OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	47.390	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 09' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	334866.6 5190945.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	4 Considerable Damage
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1960 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	405 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	32.15 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10'X12'X126' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-145-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	377	0	0	80	300	20	77	0	0
1080/3:Delamination/Spall/Patched Area	ft	300	0	0	100	300	0	0	0	0
4000/3:Settlement	ft	77	0	0	0	0	100	77	0	0
8401/3:Wings	each	4	0	0	50	2	0	0	50	2
1130/3:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
4000/3:Settlement	each	2	0	0	0	0	0	0	100	2
8402/2:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: 9/12/2007 - All Joints wider at top than bottom. West barrel up to 5". Wings and joints need to be watched. NBI Remarks: All construction joints open 1 to 3". Minor cracks in walls fill loss at construction seems to be the same as past inspections. West barrel has longitudinal crack along roofline the entire length. Sw wing has previous repair for separation, the bottom of repair has broken away leaving 1 x 2' void with steel exposed.

Alert Code 1: Tie back cable is holding up wing and wing has stress crack where tie back is located. 12/06/2012 - NW wing is 2' to 3' away from box and scour is still active and is now 8' past the end of the box. 4/5/2018: The NW wing has separated from box. the cable tie back is exposed and dangling, giving no support. The major erosion upslope from the wing has expanded.

Alert Code 2: All wings pulling away, ne wing has 7'x1' spall steel exposed bottom of ne wing is pushing inward toward channel. four feet of fill loss from north construction joint. fill loss 4' in middle joint west wall. the north section of box is settling, top joint open 4". 11/2/2016 - NE wing is completely separated from the box. A cable tie back is the only thing holding the wing up. NW wing is separated, there is also a 16' x 6' long x 8' deep scour hole behind the wing. The cable tie back holding the wing up is exposed because of the erosion and appears to be ineffective.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-145-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 7 EAST OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 09' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	335647.5 5189764.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 40 72 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	202 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	May 02, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.6 Ft.	Underwater	N
48 Length of Max Span	33 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	Y 48 05/17/2016
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	26.6 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-145-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	253	100	253	0	0	0	0	0	0
206/3:Timber Column	each	12	25	3	50	6	25	3	0	0
1140/3:Decay/Section Loss	each	6	0	0	100	6	0	0	0	0
7000/3:Damage	each	3	0	0	0	100	3	0	0	0
216/3:Timber Abutment	ft	43	100	43	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	43	100	43	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/3:Timb Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
6000/3:Scour	each	2	0	0	200	2	0	0	0	0

Remarks: NBI Remarks: Fence under bridge is mostly gone ne corner still intact. 11/2010 - THREE EAST PILING S ABUTMENT SHOW MAJOR ICE DAMAGE. SECTION LOSS TO EAST PILING SOUTH ABUTMENT. WEST END OF BOTH BACKWALLS SHOW ICE DAMAGE. SCOUR HOLE DEVELOPING IN FRONT OF SW WING. 05/2014 - Center column noth abutment showing spall at water line.

Alert Code 1: South piling is showing dry rot where ice damage took place with 20% to 30% section loss. 5/2/2018: SE wing has major erosion behind it.

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SEC 409

Structure Number: 30-145-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	57.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 49' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 09' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	335640.9 5188132.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 15 27 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 8 15 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	14 Tons
Age and Service		Appraisal	
27 Yr Built	1948 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	40 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	12 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 02, 2018
32 Approach Roadway Width	19 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	Y 48 05/17/2016
49 Structure Length	32.15 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-145-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	775	100	775	0	0	0	0	0	0
111/1:Timber Open Girder	ft	512	0	0	100	512	0	0	0	0
1180/1:Abrasion	ft	512	0	0	100	512	0	0	0	0
206/3:Timber Column	each	12	75	9	17	2	8	1	0	0
1140/3:Decay/Section Loss	each	1	0	0	0	0	100	1	0	0
7000/3:Damage	each	2	0	0	100	2	0	0	0	0
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	52	96	50	4	2	0	0	0	0
7000/1:Damage	ft	2	0	0	100	2	0	0	0	0
332/1:Timb Bridge Railing	ft	66	100	66	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: BEAMS E2-E6 & W8-W6 HAVE SOME SCRAPES...FENCE ACROSS W SIDE. MINOR ICE DAMAGE TO EAST END OF NORTH PIER CAP.

Alert Code 2: 12/6/2012 - PILE E OF S ABUT HAS 40% SECTION LOSS TOP 3'. Carrying 30% of the load due to point loading. 5/2/2018: Pile E1 South abutment is bowed 1' at the bottom and has a shim behind it.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-145-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWEET BRIAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF SWEET BRIAR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 09' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	335656.8 5187014.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 43 78 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 16 30 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	May 02, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	49 Ft.	Other Special	N
49 Structure Length	104.00 Ft.	218 Channel Profile	Y 48 05/17/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	BRO-30(5)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-145-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,358	100	3,358	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	417	100	417	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	33	100	33	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	207	100	207	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Hairline transverse cracks visible on underside of deck with seepage.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-145-39.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LOUSE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 4 EAST OF FLASHER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 24' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 09' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	334299.3 5142400.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	7 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	April 12, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	26.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	03/27/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 14' X 11'		116 Minimum Navigation Vertical Clearance	Ft.

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Structure Number: 30-145-39.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-146-09.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03006 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 7 EAST OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	48.789	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 08' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	337047.9 5190766.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	5 Moderate Damage
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1930 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	405 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 8'X10'X161' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-146-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	482	0	0	91	440	9	42	0	0
1130/3:Cracking (RC and Other)	ft	482	0	0	91	440	9	42	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	75	3	0	0	25	1
1900/3:Distortion	each	3	0	0	100	3	0	0	0	0
4000/3:Settlement	each	1	0	0	0	0	0	0	100	1
8402/2:Headwalls	each	2	0	0	100	2	0	0	0	0

Remarks: Date 2/14/97 - South 1/3 box dropping 1.5 inches as of 1997. Hairline cracks throughout barrels and wings. South barrel section misaligned by 1" @ joint. . Both inside walls where they meet the roof have longitudinal cracks hairline to 1/8". Two beaver dams by box one 100' north and one 125' south. The 2 middle sections of all barrels show settling 1 to 3". 11/1/2016 - Debris is partially blocking the center barrel and is restricting flow on the north end. Center and East barrels have sediment on the floor from a couple inches on the north end to 2 Feet on the south end.

Alert Code 1: construction joints open 4" with 4'+ fill loss at 4' and up to roof. 11/2010 - NE NW & SE WINGS TILTING TOWARD BOX AT TOP. SE WING TILTING INWARD 15" AT TOP. 4'X 4'X 3' EROSION BEHIND. NE WING TILTING IN 12" AT TOP. 10'X 5'X 6' EROSION BEHIND CORNER OF BOX AND WING.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-146-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	70.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HEART RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH 7 EAST OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 46' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 08' 23.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	336636.9 5181732.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel continuous	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	31 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	17 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	25 Tons
Age and Service		Appraisal	
27 Yr Built	1945 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	30 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	12 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 02, 2018
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	20.0 Ft.	Other Special	Y 96
48 Length of Max Span	107 Ft.	218 Channel Profile	Y 48
49 Structure Length	236.88 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	02/06/2017
51 Bridge Rdwy Width - Curb to Curb	20.0 Ft.	213 Federal Aid Project Number	WER-20(A)
52 Deck Width	21.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 30-146-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	5,145	95	4,888	5	257	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	257	0	0	100	257	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	948	0	0	100	948	0	0	0	0
1000/2:Corrosion	ft	948	0	0	100	948	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
210/3:Re Conc Pier Wall	ft	43	0	0	100	43	0	0	0	0
1090/3:Exposed Rebar	ft	43	0	0	100	43	0	0	0	0
215/2:Re Conc Abutment	ft	43	0	0	51	22	49	21	0	0
6000/2:Scour	ft	43	0	0	51	22	49	21	0	0
234/2:Re Conc Pier Cap	ft	43	0	0	100	43	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	43	0	0	100	43	0	0	0	0
311/2:Moveable Bearing	each	4	75	3	0	0	0	0	25	1
2220/2:Alignment	each	1	0	0	0	0	0	0	100	1
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
313/3:Fixed Bearing	each	12	100	12	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/3:Metal Bridge Railing	ft	472	100	472	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
331/2:Re Conc Bridge Railing	ft	472	0	0	100	472	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	472	0	0	100	472	0	0	0	0
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
1130/2:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0

Remarks: EAST ABUTMENT HAS EROSION UNDER IT, PILE EXPOSED 1'. CENTER SPAN BEAMS SAGGING SLIGHTLY. EXPANSION JOINTS ARE OPEN 1/4" ON WEST JOINT. EAST JOINT 1/8", @ 60 DEGREES F. THE NORTH ROCKER IS LEANING AWAY FROM FIXED. THE OTHER ONES ALMOST VERTICAL. EXPANSION JOINTS ARE OPEN LETTING 12/6/12012 - 2' X 1' spall on west pier. Rebar exposed with no section loss visible. WATER DOWN ONTO PIN AND HANGERS CAUSING SOME RUSTING. POOR SIGHT DISTANCE FROM WEST. PIN AND HANGERS ARE NOT ACCESSABLE WITHOUT SPECIALIZED EQUIPMENT. WEST ABUTMENT IS ALSO BEING UNDERMINED, PILING EXPOSED. FENCE ACROSS CHANNEL N SIDE. SPALL IN CONCRETE RAILING OUTSIDE ABOVE ALL JOINTS. 11/1/2016 - Elemnet 161/3 Pin and Hangers missing from element list. Need count on next inspection.

Alert Code 2: 12/6/2012 - North rocker is leaning 40° away from fixed end and remaining rockers are vertical. 11/1/2016 - East abutment has 6 piles exposed from 1' to 2' and 4' under abutment. West abutment has 14' undermined with 2 piles exposed 6" and west slope protection serious erosion. Scour on South side east pier(P2) footing exposed.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-147-08.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03008 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 7 EAST OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.200	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 08' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	337348.7 5192153.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1940 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	230 30 Year of ADT 2018	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X8X48' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-147-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	95	0	0	100	95	0	0	0	0
1130/3:Cracking (RC and Other)	ft	95	0	0	100	95	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
8402/3:Headwalls	each	2	0	0	100	2	0	0	0	0

Remarks: Sw wing cracked. Parapets cracked at wing connections. . Se wing has minor crack.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-148-08.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03008 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CROWN BUTTE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 8 EAST OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.799	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 52' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 05' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	340318.8 5192932.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1945 106 Yr Reconstructed 1988	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	230 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	May 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	AHL-3008(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X10X30' RCB + 16'LT & 16'RT. EXT.		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-148-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	125	99	124	1	1	0	0	0	0
1130/3:Cracking (RC and Other)	ft	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/3:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: NBI Remarks: Hairline crack on joint of se wing and parapet. 6" x 12" honeycomb east wall of original box.
05/2014 - Unable to inspect interior of box due to high water. 10/31/2016 - Unable to inspect interior of box due to high water.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-149-13.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWEET BRIAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 WEST 2 SOUTH OF MANDAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 47' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 04' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	341336.9 5184625.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 29 54 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2003 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 02, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	87 Ft.	Other Special	N
49 Structure Length	91.86 Ft.	218 Channel Profile	Y 48 05/26/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.8 Ft.	213 Federal Aid Project Number	DPI-0036(006)303
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-149-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,852	100	2,852	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	442	100	442	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	65	100	65	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	184	100	184	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/2010 - A FEW CRACKS ON UNDERSIDE OF DECK WITH SEEPAGE VISABLE. 11/1/16 - Large crack and spall at 5th bridge rail post from the west, south side of bridge.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-150-02.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	OTTER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 6 NORTH OF MANDAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 03' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	343880.7 5201684.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 36 65 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 33 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	207 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1976 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	50 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 02, 2018
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.3 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	Y 48 05/11/2016
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-150-02.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	144	100	144	0	0	0	0	0	0
206/3:Timber Column	each	12	100	12	0	0	0	0	0	0
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	49	100	49	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	49	82	40	18	9	0	0	0	0
1020/1:Connection	ft	9	0	0	100	9	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
1900/3:Distortion	each	1	0	0	100	1	0	0	0	0

Remarks: 11/2010 - A FEW CRACKS ON UNDERSIDE OF DECK WITH SEEPAGE VISABLE. 05/2014 - One post supporting the timber railing is cracked.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-150-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	57.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE AREA	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH 10 EAST OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 04' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	342476.0 5196883.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 11 19 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 6 11 Tons
208 Dk Overburden	204 Gravel/Dirt	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	17 Tons
27 Yr Built	1973 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 23, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	26 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	Y 48 05/11/2016
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-150-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	710	0	0	100	710	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	710	0	0	100	710	0	0	0	0
111/3:Timber Open Girder	ft	463	56	257	43	200	1	6	0	0
1160/3:Crack (Timber)	ft	206	0	0	97	200	3	6	0	0
206/3:Timber Column	each	12	100	12	0	0	0	0	0	0
216/3:Timber Abutment	ft	53	83	44	17	9	0	0	0	0
1160/3:Crack (Timber)	ft	9	0	0	100	9	0	0	0	0
235/3:Timber Pier Cap	ft	53	100	53	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	59	0	0	100	59	0	0	0	0
1140/2:Decay/Section Loss	ft	59	0	0	120	59	0	0	0	0
7000/2:Damage	ft	0	0	0	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
1900/3:Distortion	each	1	0	0	100	1	0	0	0	0

Remarks: Date 2/14/97 - Old pile on east abutment near scour area. Ice damage on fascia girders north and south. Poor sight distance both directions due to vertical curves. 10/2010 - BOTTOM DIAGONAL CRACK ON CENTER SPAN IN BEAM. CENTER OF SOUTH BEAM BOTH ENDS CRACKED.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-150-10.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03006 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CROWN BUTTE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 11 EAST OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	52.389	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 27.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 03' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	342553.3 5189550.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1948 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	405 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	44.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	32.15 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 12'X10'X98' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-150-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	295	0	0	92	270	9	25	0	0
1080/3:Delamination/Spall/Patched Area	ft	25	0	0	0	0	100	25	0	0
1130/3:Cracking (RC and Other)	ft	270	0	0	100	270	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
8402/3:Headwalls	each	2	0	0	100	2	0	0	0	0

Remarks: Ne wing moving 6" toward channel. Cracked parapet ne corner. Trees in channel to south, also behind north wings. All construction joints open 2" Spall on se corner of top of wing also few spalls in east barrel. Spall at south side of middle barrel. Panel fence across north opening. 11/2010 -EAST BARREL HAS SPALL ON ROOF WITH REBAR EXPOSED.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-150-12.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 8 Service R 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SWEET BRIAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 1 SOUTH OF MANDAN	103 Temporary Structure Designation	Unknown (NBI)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 29.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 02' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 343625.4 5185868.9		Condition	
98 Border Bridge Unknown (P) 0.00 %		58 Deck	N N/A (NBI)
99 Border Bridge Struct No. –		59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	3 LRFR Load & Res. Fact
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 30
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	3 LRFR Load & Res. Fact
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 23
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built 2012 106 Yr Reconstructed		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT 5 30 Year of ADT 2019		71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	September 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.6 Ft.	Underwater	N
48 Length of Max Span	112 Ft.	Other Special	N
49 Structure Length	112.00 Ft.	218 Channel Profile	1 48
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	09/18/2019
	27.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-150-12.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
15/1:Pre Concrete Top Flange	sq.ft	3,360	100	3,360	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	1,120	100	1,120	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	60	100	60	0	0	0	0	0	0
310/1:Elastomeric Bearing	each	20	100	20	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	254	100	254	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 01/03/2019 - Poor roadway alignment. Debris in channel under structure. - 9/25/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-152-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 NORTH 13 EAST OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 00' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	346937.2 5196819.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 43 78 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 34 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	50 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 23, 2018
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.6 Ft.	Other Special	N
48 Length of Max Span	29 Ft.	218 Channel Profile	Y 48 05/11/2016
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-152-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	187	100	187	0	0	0	0	0	0
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	59	0	0	100	59	0	0	0	0
6000/3:Scour	ft	59	0	0	100	59	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	62	95	59	5	3	0	0	0	0
1130/3:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
332/2:Timb Bridge Railing	ft	62	100	62	0	0	0	0	0	0
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
6000/3:Scour	each	2	0	0	100	2	0	0	0	0

Remarks: 12/17/2002 - Loss of fill behind both abutments on lower portion. NBI Remarks: Erosion behind nw & se wings.

Alert Code 1: Three foot scour under bridge.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-153-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	64.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	OTTER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 NORTH 13 EAST OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 00' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	347700.6 5199411.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	4	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 26 48 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 17 32 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1945 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	15 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 23, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.3 Ft.	Other Special	N
48 Length of Max Span	20 Ft.	218 Channel Profile	Y 48 05/11/2016
49 Structure Length	64.96 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	02/08/2017
51 Bridge Rdwy Width - Curb to Curb	22.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 30-153-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,572	0	0	0	0	100	1,572	0	0
7000/1:Damage	sq.ft	1,572	0	0	0	0	100	1,572	0	0
111/1:Timber Open Girder	ft	846	0	0	5	42	95	804	0	0
1140/1:Decay/Section Loss	ft	804	0	0	0	0	100	804	0	0
7000/1:Damage	ft	42	0	0	100	42	0	0	0	0
206/3:Timber Column	each	25	40	10	40	10	20	5	0	0
1140/3:Decay/Section Loss	each	5	0	0	0	0	100	5	0	0
7000/3:Damage	each	10	0	0	100	10	0	0	0	0
216/3:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
1160/3:Crack (Timber)	ft	52	0	0	100	52	0	0	0	0
231/1:Steel Pier Cap	ft	72	0	0	100	72	0	0	0	0
1000/1:Corrosion	ft	72	0	0	100	72	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
7000/1:Damage	sq.ft	100	0	0	100	100	0	0	0	0
235/1:Timber Pier Cap	ft	49	0	0	0	0	100	49	0	0
4000/1:Settlement	ft	49	0	0	0	0	100	49	0	0
332/1:Timb Bridge Railing	ft	131	0	0	92	120	0	0	8	11
1140/1:Decay/Section Loss	ft	120	0	0	100	120	0	0	0	0
7000/1:Damage	ft	11	0	0	0	0	0	0	100	11
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
7363/1:Steel Section Loss	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	50	2	0	0	50	2
1140/3:Decay/Section Loss	each	2	0	0	0	0	0	0	100	2
1900/3:Distortion	each	2	0	0	100	2	0	0	0	0

Remarks: Date 12/02/2004 - Pier 4, erosion has undermined the concrete bumpers on two columns. No loss of bearing. Backwalls of both abutments separating. On spans 1 and 4 double 2x12 are installed between stringers but carry no load. Brush and trees in channel up & downstream restricting channel 25 percent. Fire damage to underside of structure with 1 1/2" section loss in width spans 2 & 3. Bridge div : june 1998-ratings reduced due to section loss. 10/27/16 - 2.5" of overburden on deck.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-153-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH 14 EAST OF JUDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 59' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	348686.9 5197609.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1993 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	May 31, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	SO-30(18)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
DOUBLE, 10X10X66' PRECAST RCB			

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-153-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	131	99	129	2	2	0	0	0	0
1130/3:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8402/2:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: 3/27/2007 - 2' area near west end cracking at previously patched area minor. There is some channel aggradation on the upstream end, in front of both barrels slightly restricting the flow of the north barrel.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-154-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 4 WEST ST ANTHONY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 37' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 58' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	348662.3 5166194.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2007 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	May 14, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.7 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	27.89 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	AC-BRO-0030(012)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14'X 10'X 54' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-154-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	108	100	108	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8402/1:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: NBI Remarks: Steel stringer replaced with 14 x 10 x 54' rcb. 11/10/16 - 4" x 4" x 1" spall on top of both wing walls on north side of box where they meet parapit.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-154-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	S BR LITTLE HEART RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 3 WEST ST ANTHONY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 35' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 57' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	349505.1 5161534.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2017 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	7 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	April 05, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	04/10/2018
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 14 X 10 X 27' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-154-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	54	100	54	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 4/10/2018 - Bridge replaced with a RCB.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-156-04.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	65.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SQUARE BUTTE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 6 NORTH OF MANDAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 55' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	353024.9 5198301.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	41 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	19 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1971 106 Yr Reconstructed	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 23, 2018
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.6 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	Y 48
49 Structure Length	40.03 Ft.	Chaining Date	05/11/2016
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	None
	0.7 Ft Lt-Side	212 Structure Load Rated	-1
51 Bridge Rdwy Width - Curb to Curb		213 Federal Aid Project Number	01/01/1901
	23.0 Ft.	214 Delayed Inspection	Not Applicable
52 Deck Width	24.9 Ft.	216 Inspector	Demaree, Mertz
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	Navigation Data	
54 Min Vert Underclearance	0 Ft. 0 In.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
55 Min Lateral UnderClear. - Rt	99.9 Ft.	40 Navigation Horizontal Clearance	0 Ft.
	N Feature not hwy or RR	111 Pier or Abutment Protection	Unknown (NBI)
56 Min Lateral UnderClear. - Lt	0.0 Ft.	116 Minimum Navigation Vertical Clearance	-1 Ft.
210 Culvert / 211 Description			

Structure Number: 30-156-04.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	322	0	0	100	322	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	322	0	0	100	322	0	0	0	0
206/3:Timber Column	each	22	100	22	0	0	0	0	0	0
216/3:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
7000/3:Damage	ft	49	0	0	100	49	0	0	0	0
235/2:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	79	0	0	100	79	0	0	0	0
1000/1:Corrosion	ft	79	0	0	100	79	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
331/2:Re Conc Bridge Railing	ft	79	0	0	100	79	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	79	0	0	100	79	0	0	0	0
8401/3:Wings	each	4	25	1	75	3	0	0	0	0
1170/3:Split/Delamination (Timber)	each	3	0	0	100	3	0	0	0	0

Remarks: 10 pile non-load bearing South in each abutment. New NE wing. East abutment wall straightened. New dead men under East abutment. East abutment leans 2" in 4 feet. 03/04/2009 - 2'x 3' fire damage east abutment and 20% section loss on south pile east abutment fire damage. Poor sight distance both ends due to horizontal curves. Timber holding piling in line has ice damage on both abutments. Some longitudinal cracking on the top of three box beams. South piling east backwall has old fire damage, top 3' approximately 20 % section loss. 10/31/16 - N/S Box beam fascia has numerous 4" - 6" spalls. NW wing has a board with 5' split. timber holding west piles has 6' split. Second pile from N on East abutment shows signs of crushing. But pile is tied to abutment.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-156-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SQUARE BUTTE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 5 NORTH MANDAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 55' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	353532.0 5196788.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2004 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	144 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 23, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	39.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	21 Ft.	Other Special	N
49 Structure Length	42.98 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	AC-BRO-RSO-0030(021)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
DOUBLE, 16X16X124' RCB			

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-156-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	248	76	188	24	60	0	0	0	0
1130/3:Cracking (RC and Other)	ft	60	0	0	100	60	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
1130/3:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0

Remarks: 3/6/2007 - 12 cracks in south barrel with 40' of longitudinal cracking. 9 cracks in north barrel with 25' of longitudinal cracking. 6 cracks in southwest wing one being 1/8" wide. NBI Remarks: Sw corner where wing meets box has 1/8 in. Cracks. Also, several hairline cracks vertical and horizontal on walls. Longitudinal cracks all 4 corners-outside walls approx. 15' long hairline.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-159-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE HEART RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 2 EAST ST ANTHONY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 40' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 52' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	356704.6 5170989.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 30 55 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	April 23, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	51 Ft.	Other Special	N
49 Structure Length	123.03 Ft.	218 Channel Profile	Y 48 05/03/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.5 Ft.	213 Federal Aid Project Number	BRO-30(17)
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-159-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,757	94	3,532	6	225	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	11	100	11	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	225	0	0	100	225	0	0	0	0
104/2:Pre Clsd Box Girder	ft	492	100	492	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	62	98	61	0	0	2	1	0	0
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	0	0	100	1	0	0
215/2:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	246	100	246	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 4/23/18- Poor sight distance both directions. Numerous transverse hairline cracks with seepage visible from underside. Trees and bushes starting to accumulate adjacent to all wings.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-160-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	45.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE HEART CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH 4 EAST ST ANTHONY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 41' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 50' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	359404.7 5171675.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	2 Critical
99 Border Bridge Struct No.	–	59 Superstructure	3 Serious
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	9 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	8 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	4 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	4 Tolerable
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 17, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	18.0 Ft.	Other Special	N
48 Length of Max Span	29 Ft.	218 Channel Profile	Y 48 07/20/2016
49 Structure Length	32.15 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	09/27/2019
51 Bridge Rdwy Width - Curb to Curb	18.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Jochim, Kerzman
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 30-160-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	581	0	0	0	0	93	541	7	40
1080/2:Delamination/Spall/Patched Area	sq.ft	541	0	0	0	0	100	541	0	0
Notes:deck has delamination thru out and holes. - 9/17/2019										
7000/2:Damage	sq.ft	40	0	0	0	0	0	0	100	40
Notes:From girder being displaced west side of deck for entire length and about 1ft is missing. - 9/17/2019										
107/1:Steel Opn Girder/Beam	ft	306	0	0	89	272	0	0	11	34
1000/1:Corrosion	ft	272	0	0	100	272	0	0	0	0
Notes:exposed beams have corrosion - 9/17/2019										
1900/1:Distortion	ft	34	0	0	0	0	0	0	100	34
Notes:West be displaced - 9/17/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:no coating - 9/17/2019										
215/3:Re Conc Abutment	ft	36	0	0	0	0	100	36	0	0
1080/3:Delamination/Spall/Patched Area	ft	36	0	0	0	0	100	36	0	0
Notes:both abutments have spalls and delamination with some rebar exposed on south abutment. - 9/17/2019										
330/2:Metal Bridge Railing	ft	66	0	0	0	0	0	0	100	66
7000/2:Damage	ft	66	0	0	0	0	0	0	100	66
Notes:Metal railing is all gone - 9/17/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:railing gone. - 9/17/2019										
7363/2:Steel Section Loss	each	1	0	0	0	0	100	1	0	0
8401/3:Wings	each	4	0	0	0	0	25	1	75	3
1080/3:Delamination/Spall/Patched Area	each	3	0	0	0	0	0	0	100	3
Notes:SW wing has large spalls with rebar exposed. SE wing top is about to fall off. Top 1 foot on NW wing is all spalled off. - 9/17/2019										
1130/3:Cracking (RC and Other)	each	1	0	0	0	0	100	1	0	0
Notes:Top of NE wing is all cracked and soon will spill off. - 9/17/2019										

Remarks: Possible wheel trap on edges of deck that has hole and side missing. remainder of deck still serviceable. Steel beams encased in concrete. Rail completely gone. Hairline cracks both vertical & transverse with a 3" wide x 1' long spall on north backwall concrete between beams, south backwall, has some spalling. SW wing starting to separate, 1" wide down to hairline in 8'. no end markers, Scaling on south abutment, moderate, 6' long 2' wide 1" depth. 5 ft X 3 ft concrete broken off of SW corner of SW wing. Erosion by SE wing 5 ft deep, 10 ft long, 2 ft wide on top. West girder is seperated from deck and has lost all structure integrity. Barb wire gate on west side of bridge 7/2017 - Bridge to be replaced with a triple box. - 9/17/2019

Alert Code 1: No end markers. - 9/17/2019

Alert Code 2: Deck has hole NW corner 4' long 8" wide. hole is at the corner and out of the wheel tracks. The West side of deck is all gone for entire length of bridge and 8 inches wide. - 9/17/2019

Alert Code 3: West girder is separated from deck and has lost all structure integrity. - 9/17/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-160-22.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	42.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 3 EAST ST ANTHONY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 40' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 50' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	359345.5 5170400.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 6 12 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 2 4 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	208 Gravel/Dirt	209 Posted in "Tons"	14 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	15 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 23, 2018
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.0 Ft.	Other Special	N
48 Length of Max Span	36 Ft.	218 Channel Profile	Y 48 05/09/2016
49 Structure Length	41.01 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	19.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 30-160-22.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	829	0	0	100	829	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	829	0	0	100	829	0	0	0	0
111/2:Timber Open Girder	ft	532	0	0	85	451	15	81	0	0
1150/2:Check/Shake	ft	532	0	0	85	451	15	81	0	0
206/3:Timber Column	each	11	100	11	0	0	0	0	0	0
216/3:Timber Abutment	ft	43	0	0	100	43	0	0	0	0
1140/3:Decay/Section Loss	ft	43	0	0	100	43	0	0	0	0
235/2:Timber Pier Cap	ft	43	100	43	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	82	100	82	0	0	0	0	0	0
8401/3:Wings	each	4	25	1	75	3	0	0	0	0
1900/3:Distortion	each	3	0	0	100	3	0	0	0	0

Remarks: East and West abutments no longer support structure, they are only holding up the backwalls. 5 new pile and pair caps have been installed next to each abutment. These added pile and caps are now supporting the structure. SW wingwall has erosion behind it and has a broken pile.

Alert Code 1: Two stringers cracked n1 & n3.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-160-22.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 3 EAST ST ANTHONY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 39' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 50' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	359490.6 5169728.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	7 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	April 23, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	29.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	02/08/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 14 X 11 X 52' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-160-22.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	104	100	104	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/9/16 - REPLACED WITH BOX CULVERT 4/23/2018: Fence across east and west openings, catching debris

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-160-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 3 EAST ST ANTHONY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 38' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 50' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	359474.9 5167149.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2008 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	7 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 23, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-00030(038)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14'X 7'X 61'PRECAST BOX		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-160-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	122	100	122	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/1:Headwalls	each	2	50	1	50	1	0	0	0	0

Remarks: Poor channel alignment on both east & west sides. 11/2010 - RIPRAP PLACED NW & SE SLOPES. 08/2012 - All precast sections separated ½" to 1". 11/9/16 - All four wing walls have Rip-Rap.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-161-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	83.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE HEART RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 NORTH 4 EAST ST ANTHONY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 41' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 49' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	360405.6 5172609.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Steel continuous	61 Chan. & Chan. Protection	9 No Deficiencies
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 20 37 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 12 22 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	7 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	April 23, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	116.14 Ft.	218 Channel Profile	Y 48 05/03/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	02/07/2017
52 Deck Width	30.8 Ft.	213 Federal Aid Project Number	BRO-30(7)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Demaree, Mertz
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-161-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	3,574	100	3,574	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	463	100	463	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	62	100	62	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	233	100	233	0	0	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NO OVERBURDEN. ALL BEAMS RUSTED. MINOR EROSION AROUND NW WING. 11/9/16 - Transverse cracks 1/16" or less. Beaver dam under construction under bridge. 4/23/2018: Numerous trees in the channel.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-161-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	61.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 8 Service R 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location 3 NORTH 3 EAST ST ANTHONY		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 39' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 50' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 359635.4 5168951.2		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1		P Posted for load
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating HS 10	18 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating HS 6	12 Tons
208 Dk Overburden 1	None	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	17 Tons
27 Yr Built 1973 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 10 30 Year of ADT 2018		71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	15 Ft.	90 Date of Last Inspection	April 23, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.3 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile Y 48	05/03/2016
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 30-161-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	936	0	0	100	934	0	0	0	2
1180/1:Abrasion	sq.ft	936	0	0	100	934	0	0	0	2
111/2:Timber Open Girder	ft	640	0	0	100	640	0	0	0	0
1140/2:Decay/Section Loss	ft	640	0	0	100	640	0	0	0	0
206/3:Timber Column	each	12	50	6	42	5	8	1	0	0
1170/3:Split/Delamination (Timber)	each	6	0	0	83	5	17	1	0	0
216/3:Timber Abutment	ft	49	0	0	82	40	18	9	0	0
1900/3:Distortion	ft	49	0	0	82	40	18	9	0	0
235/2:Timber Pier Cap	ft	52	50	26	39	20	12	6	0	0
1900/2:Distortion	ft	26	0	0	77	20	23	6	0	0
332/2:Timb Bridge Railing	ft	73	100	73	0	0	0	0	0	0
7000/2:Damage	ft	6	0	0	0	0	0	0	100	6
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1900/3:Distortion	each	4	0	0	100	4	0	0	0	0

Remarks: Date 2/6/2003 - Hollow spots behind west abutment. Cap twisting on west abutment. W abut pile N offering little bearing. Entire W abut. bowing in 6". : All wings show minor erosion. Trees & debris in channel. Channel change on n side of structure. Some nails on deck are pulling out and bending over two rows.Both backwalls are leaning, west inward,east back away from channel. Deck showing excessive wear in the wheel tracks. 08/2012 - Top 3 planks on NW wing out of alignment. 11/9/16 - New bridge rail installed on both N & S sides. Deck has one plank with 3" x 6' long crack and splintered piece.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-164-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ATV TRAIL	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	12 South of I94 off 1806	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 39' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 50' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	364697.7 5169867.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	N N/A (NBI)
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	5	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 22 40 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 16 29 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	0 Other - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	N Not applicable
29 ADT	1 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	0.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	1 Miles	113 Scour Critical	N Not Over Waterway
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 23, 2018
32 Approach Roadway Width	17 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	0 01/01/1901
35 Structure Flared	0 No flare	Underwater	0 01/01/1901
47 Total Horizontal Clearance	18.7 Ft.	Other Special	0 01/01/1901
48 Length of Max Span	22 Ft.	218 Channel Profile	0 0
49 Structure Length	102.00 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.9 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.9 Ft Lt-Side	212 Structure Load Rated	12/01/2015
51 Bridge Rdwy Width - Curb to Curb	18.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-164-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	2,060	0	0	80	1,644	20	408	0	8
Notes: _										
1180/1:Abrasion	sq.ft	2,060	0	0	80	1,644	20	408	0	8
111/1:Timber Open Girder	ft	1,020	100	1,020	0	0	0	0	0	0
Notes: _										
216/1:Timber Abutment	ft	40	90	36	10	4	0	0	0	0
Notes: _										
1160/1:Crack (Timber)	ft	40	90	36	10	4	0	0	0	0
235/1:Timber Pier Cap	ft	80	100	80	0	0	0	0	0	0
Notes: _										

Remarks: 4/23/18- Both backwalls have a small split with minor fill loss. Wheel paths have left a 2' wide depression the entire length of the deck. Deck has several small areas (less than 1 SF) of rot and minimal section loss.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-166-31.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Morton	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03026 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 6 WEST FT RICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	17.397	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 32' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 43' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	368185.7 5155680.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2001 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	April 11, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	SC-3026(053)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Demaree, Mertz
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
DOUBLE, 12X5X60' PRECAST RCB			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 30-166-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	121	100	121	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
1080/3:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
8402/2:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: 4/11/18- 10"x8" spall top of SE wing. 10"x6" spall halfway down SE wing.

Structure Number: MAN01

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Bismarck District	22 Owner	City/Municipal Hwy Agenc
03 County	Morton	26 Functional	Urban, Local
04 City	MANDAN CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 0 None of tl 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WATER WAY	102 Direction of Traffic	2 2-way traffic
09 Location LAKEWOOD HARBOR MANDAN		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 50' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 360061.0 5184647.5		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 42
208 Dk Overburden 32	Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 2007 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 250 30 Year of ADT 2019		71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	48 Ft.	90 Date of Last Inspection	April 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	47.9 Ft.	Underwater	N
48 Length of Max Span	75 Ft.	Other Special	N
49 Structure Length	80.05 Ft.	218 Channel Profile	1 48
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	05/10/2017
	5.9 Ft Lt-Side	207 Transporter Erector Routes and Sites	None
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	-1
	47.9 Ft.	213 Federal Aid Project Number	01/01/1901
52 Deck Width	57.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kerzman, Wollmuth
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: MAN01

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	1,520	100	1,520	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	122	100	122	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	131	100	131	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	160	97	155	3	5	0	0	0	0
1130/1:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
Notes:Bridge rail has hairline to 1/8" vertical cracks with effloresce visible on front and back of railing - 4/3/2019										
8398/1:Slope Protection	each	1	0	0	100	1	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Both sides of bridge slope protection concrete pads and rip-rap settled from original grade - 4/3/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Settlement at both ends of bridge causing ramping onto bridge. . West concrete slope protection pulled away about 3" and east slope protection pulled away 3" to 4". SE & NW safety shapes have a large spall. - 4/3/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: MAN02

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Bismarck District	22 Owner	City/Municipal Hwy Agenc
03 County	Morton	26 Functional	Urban, Local
04 City	MANDAN CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street	0 None of tl 00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WATER WAY	102 Direction of Traffic	2 2-way traffic
09 Location	LAKEWOOD HARBOR MANDAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 47' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 50' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	359815.8 5183918.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 42 76 Tons
208 Dk Overburden	32 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2007 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	250 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	40 Ft.	90 Date of Last Inspection	April 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	75 Ft.	Other Special	N
49 Structure Length	80.05 Ft.	218 Channel Profile	1 48 05/10/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	12.1 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	29.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	44.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kerzman, Wollmuth
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: MAN02

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	1,200	100	1,200	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	98	100	98	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	131	100	131	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	160	96	153	4	7	0	0	0	0
1130/1:Cracking (RC and Other)	ft	7	0	0	100	7	0	0	0	0
Notes:Hairline to 1/8" vertical cracks on both side of rail - 4/3/2019										
8398/1:Slope Protection	each	1	0	0	100	1	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Both sides of bridge concrete pads and rip-rap have settled from original grade - 4/3/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Spalls on NW & SW safety shapes. Sidewalk has 2" settlement on both ends of the bridge. - 4/3/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: MAN03

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Bismarck District	22 Owner	City/Municipal Hwy Agenc
03 County	Morton	26 Functional	Urban, Local
04 City	MANDAN CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 0 None of tl	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WATER WAY	102 Direction of Traffic	2 2-way traffic
09 Location LAKEWOOD HARBOR MANDAN		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 47' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 50' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	359979.3 5183210.0	Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 42
208 Dk Overburden	31 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2007	Appraisal	
106 Yr Reconstructed	-1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	250	72 App. Rdwy. Alignment	8 Equal Desirable Crit
30 Year of ADT	2019	36 Traffic Safety Features	1 0 0 0
109 Average Daily Truck Traffic	1.00	113 Scour Critical	8 Stable Above Footing
19 Bypass, Detour Length	1 Miles		
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 03, 2019
32 Approach Roadway Width	40 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	29.9 Ft.	Other Special	N
48 Length of Max Span	80 Ft.	218 Channel Profile	1 48
49 Structure Length	80.05 Ft.	Chaining Date	05/10/2017
50 Curb/Sidewalk Widths	5.9 Ft Rt-Side	207 Transporter Erector Routes and Sites	None
	0.0 Ft Lt-Side	212 Structure Load Rated	-1
51 Bridge Rdwy Width - Curb to Curb		213 Federal Aid Project Number	01/01/1901
	29.9 Ft.	214 Delayed Inspection	Not Applicable
52 Deck Width	39.0 Ft.	216 Inspector	Kerzman, Wollmuth
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	Navigation Data	
54 Min Vert Underclearance	0 Ft. 0 In.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
55 Min Lateral UnderClear. - Rt	99.9 Ft.	40 Navigation Horizontal Clearance	0 Ft.
	N Feature not hwy or RR	111 Pier or Abutment Protection	Unknown (NBI)
56 Min Lateral UnderClear. - Lt	0.0 Ft.	116 Minimum Navigation Vertical Clearance	-1 Ft.
210 Culvert / 211 Description			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: MAN03

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	1,040	100	1,040	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	84	100	84	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	131	100	131	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	160	94	150	6	10	0	0	0	0
1130/1:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:hairline to 1/8" vertical cracks both sides of rail - 4/3/2019										
8398/1:Slope Protection	each	1	0	0	100	1	0	0	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Both sides of bridge concrete pads and rip-rap have settled from original grade. - 4/3/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Asphalt patches on bridge ends from settlement. Back side of all 4 corners of safety shapes spalled out where they meet the bridge rail. - 4/3/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 31-103-11.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Mountrail	26 Functional	Rural, Major Collector
04 City	WHITE EARTH TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03110 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PAULSON CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST WHITE EARTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.500	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 23' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 49' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	216925.5 5366392.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	115 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 02, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	25.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBRS-3110(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 11X11X64' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 31-103-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	128	100	128	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Hairline vertical cracks in both barrel walls and all four wingwalls. Random hairline cracks at junction of wing and parapet, typical all four corners. 11/2012 – Minor efflorescence at base of all barrel walls in cracks. 8/2018- NE wingwall has hairline cracking.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 31-106-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	82.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Mountrail	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WHITE EARTH RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	12 SOUTH OF WHITE EARTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 11' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 45' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	220668.1 5344565.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Slab		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	62 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	32 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	20 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	5 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 02, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.0 Ft.	Other Special	N
48 Length of Max Span	27 Ft.	218 Channel Profile	1 48 06/12/2017
49 Structure Length	74.15 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	22.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 31-106-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
38/3:Re Concrete Slab	sq.ft	1,776	83	1,474	17	302	0	0	0	0
210/3:Re Conc Pier Wall	ft	49	0	0	92	45	8	4	0	0
215/3:Re Conc Abutment	ft	49	0	0	49	24	51	25	0	0
331/3:Re Conc Bridge Railing	ft	148	0	0	100	148	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0

Remarks: NBI Remarks: Minor ice damage and spalling to north pier. Backwalls and wings have hairline vertical and diagonal cracks. Minor honeycomb on underdeck of south span. Minor vertical crack to center of south pier. Minor transverse cracks in both curbs. Random hairline cracks in deck surface. Medium vertical crack at center of north abutment face. Channel runs from 10 feet south of north pier to face of north abutment. 2 foot deep scour at upstream end of north pier. Entire footing exposed on north abutment. Minor to moderate scaling on north pier and north abutment face. Minor random cracks in north abutment face with minor efflorescence. Numerous minor diagonal cracks in northeast wingwall with minor efflorescence. 11/2012 – End marker down at NW corner. Popouts in deck surface. Severe collision damage to railing end post at NW corner. Minor scour on south side of south pier. 11/2014- 11/2014- East side of North pier has ice damage- All water channeling under north abutment, water high so footing could not be seen.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 31-136-27.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Mountrail	26 Functional	Rural, Major Collector
04 City	OAKLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03126 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHELL CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	13 NORTH 1 EAST PARSHALL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	11.797	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 09' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 05' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	269567.7 5337996.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2014 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	325 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	February 11, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	50.0 Ft.	Underwater	N
48 Length of Max Span	16 Ft.	Other Special	N
49 Structure Length	33.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	02/06/2014
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRC-3126(055)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, Peebles
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 14 X 12 X 65' PCRCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 31-136-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	130	100	130	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Bridge installed 2014- Erosion control in place around structure 1/2017: Minor spalling at joint locations. Minor cracking in center on both ends of center wall.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 32-112-20.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Nelson	26 Functional	Rural, Major Collector
04 City	WAMDUSKA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03220 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 SOUTH 3 EAST OF LAKOTA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.799	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 54' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 16' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	554642.5 5305892.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1995 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	80 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	32 Ft.	90 Date of Last Inspection	November 20, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	35.8 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DPI-0167(001)324
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X4X60' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 32-112-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	121	100	121	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 05/04/2011 - Vegetation in channel both sides. 11/6/2014 - Channel cleanout both sides. Rock riprap placed along inslopes & portion of channel bank south side. Poor channel alignment to the north.

Alert Code 1: 11/2016 - Approximately 1.5' of sediment and vegetation buildup both ends of the east barrel blocking flow. Channel runs thru west barrel.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 32-119-35.0

200 System Designation	2 – County On	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	55.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Nelson	26 Functional	Rural, Major Collector
04 City	LEE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03236 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 SOUTH 1 EAST MCVILLE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.498	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 08' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	565267.9 5281861.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 34 62 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 15 29 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1969 106 Yr Reconstructed	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	80 30 Year of ADT 2019	72 App. Rdwy. Alignment	3 Intolerable - Correct
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	7 Miles	113 Scour Critical	4 Stable, needs action
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 10, 2019
32 Approach Roadway Width	32 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	58 Ft.	218 Channel Profile	1 48 07/16/2015
49 Structure Length	120.08 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	CS-845(7)
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, inspector1
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 32-119-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	1,200	100	1,200	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	59	51	30	0	0	49	29	0	0
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
Notes:Two spall areas on West Face of Pier 2. Section loss to Spall on South End. See Photo. - 12/10/2019										
4000/3:Settlement	ft	27	0	0	0	0	100	27	0	0
Notes:Movement of Pier 2 causing loss of Bearing to Girder 1 on North Side. See Alert Code 3. - 12/10/2019										
215/3:Re Conc Abutment	ft	59	97	57	3	2	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	2	0	0	100	2	0	0	0	0
Notes:Vertical crack in each Abutment with Seepage and Efflorescence. See Photo. - 12/10/2019										
330/2:Metal Bridge Railing	ft	240	0	0	100	240	0	0	0	0
1000/2:Corrosion	ft	240	0	0	100	240	0	0	0	0
Notes:Rusting to both railings. See Photo. - 12/10/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Limited effectiveness with the various rusting to the railings. - 12/10/2019										
331/2:Re Conc Bridge Railing	ft	240	96	230	4	10	0	0	0	0
1130/2:Cracking (RC and Other)	ft	20	50	10	50	10	0	0	0	0
Notes:Minor cracking to Rail Sections meeting the deck throughout north Curb. See Photo. - 12/10/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Small spall south end west pier. Poor horizontal roadway alignment to the east. Spalling to Corners of both Abutments where it meets to Wing near the Top. See Photo. Inspection incomplete in November 2019 due to the completion of the incomplete October 2019 County Inspections. Inspection Completed 12/10/2019. - 12/10/2019

Alert Code 1: Channel bank erosion both banks both sides of structure. Pier #2 leans inward 1/2" in 4' measured @ center. - 12/10/2019

Alert Code 2: East end of beams in span #1 sitting on pier 2 4 1/2", measured on South side. West end of beams in span #3 sitting on pier 3 5 3/4", measured on north side. 11/2016 - Riprap placed approximately halfway up west side pier 2. 11/2016 - West end of beams in span 3 sitting on pier 3 6" measured on north side, 5 3/4" in 2014. 11/2018 - West end of beams span 3 sitting on pier 3 5.5" a change from 5.75. Additional movement in 2018. 12/2019 - No Change in the measurements to the South Side of Pier 2 and both sides of Pier 3. - 12/10/2019

Alert Code 3: 11/2016 - East end of beams in span 1 sitting on pier 2 3/12" measured on north side, 4 1/2" in 2014. Pier #2 leans inward 1" in 4' a change of 1/2" in 2014. Continuous movement of pier 2 in 2016. 10/2017 - In the event of further movement of piers 2 & 3 the county contracted the installation of 10 each 8" x 8" x 1" x 35" long angle irons installed to the top west side of pier 2 and top east side of pier 3 with 2 6" x 6" x 5/8" stiffeners welded at 9" in from each end of each 35" section. 11/2018 - East end of beams in span 1 pier 2 3 1/8' measured on North side. No Change in the 3 1/8" to East end of North Beam at Pier 2. Crack and minor spalling on East end of North Beam. See Photo. - 12/10/2019

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SEC 409

Structure Number: 33-130-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	77.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Oliver	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SQUARE BUTTE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 EAST 4 SOUTH OF CENTER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 03' 40.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 07' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	338054.7 5214164.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 10 19 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	90 Ft.	Other Special	N
49 Structure Length	94.16 Ft.	218 Channel Profile	Y 48 06/17/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 33-130-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,874	100	2,874	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	377	100	377	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	115	100	115	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	187	96	180	4	7	0	0	0	0
1130/2:Cracking (RC and Other)	ft	7	0	0	100	7	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
1130/2:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0

Remarks: 4/10/18 - HAIRLINE CRACKS UNDERSIDE OF DECK. NEAR BOTH ENDS WITH EFFLORESCENCE VISIBLE.
Both east wings have minor hairline cracks. NE wing has a 5" X 2" spall.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 33-132-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Oliver	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SQUARE BUTTE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 WEST 3 SOUTH OF PRICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 02' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 06' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	340088.0 5212635.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 37 67 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 34 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	110 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	5 Miles	113 Scour Critical	3 SC - Unstable
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 10, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.2 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	Y 48 06/17/2015
49 Structure Length	36.09 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	213 Federal Aid Project Number	CS-949(4)
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	McCloud, Jochim
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 33-132-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	361	99	358	1	3	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
202/3:Steel Column	each	14	71	10	29	4	0	0	0	0
1000/3:Corrosion	each	4	0	0	100	4	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
217/3:Masonry Abutment	ft	62	68	42	0	0	32	20	0	0
1630/3:Patched Area (Masonry)	ft	20	0	0	0	0	100	20	0	0
231/2:Steel Pier Cap	ft	66	100	66	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
330/2:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
331/2:Re Conc Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8398/2:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0

Remarks: 4/10/18 - Minor ice damage to north pile both abuts. Minor cracking and scaling on all wings. East abutment has 10 ft longitudinal crack open 2" with 2" of fill loss evident. Both Abutments have 2in crack with fill being loss and previous repair has fallen out.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 33-134-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Bismarck District	22 Owner	County Hwy Agency
03 County	Oliver	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SQUARE BUTTE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 5 SOUTH OF PRICE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 00' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 03' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	343309.6 5208388.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 36 66 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 34 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	20 Tons
27 Yr Built	1978 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	April 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	Y 48 06/18/2015
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.2 Ft.	213 Federal Aid Project Number	78-26-10
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	McCloud, Jochim
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 33-134-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	322	99	319	1	3	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
202/3:Steel Column	each	14	0	0	100	14	0	0	0	0
1000/3:Corrosion	each	14	0	0	100	14	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
219/4:Stl Abutment	ft	59	100	59	0	0	0	0	0	0
515/4:Steel Protective Coating	sq.ft	59	51	30	49	29	0	0	0	0
3440/4:Eff (Stl Protect Coat)	sq.ft	29	0	0	100	29	0	0	0	0
231/1:Steel Pier Cap	ft	66	97	64	3	2	0	0	0	0
1000/1:Corrosion	ft	2	0	0	100	2	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	79	100	79	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	79	100	79	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 4/10/18 - Ice damage to wing pile both north wings. Minor. Bank upstream has slumped. Stream bed is moving westward. Pilling have rust forming at waterline no section loss measured.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-102-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	74.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	GARDAR TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NORTH FORK PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST GARDAR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 35' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 54' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	580687.9 5382166.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 21 38 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 13 24 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1976 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	24 30 Year of ADT 2014	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 25, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.2 Ft.	Other Special	N
48 Length of Max Span	50 Ft.	218 Channel Profile	1 48 05/19/2015
49 Structure Length	53.15 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-102-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,572	100	1,572	0	0	0	0	0	0
111/2:Timber Open Girder	ft	299	100	299	0	0	0	0	0	0
206/3:Timber Column	each	16	69	11	13	2	19	3	0	0
1170/3:Split/Delamination (Timber)	each	5	0	0	40	2	60	3	0	0
Notes:_										
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	105	99	104	1	1	0	0	0	0
1140/1:Decay/Section Loss	ft	1	0	0	100	1	0	0	0	0
Notes:_										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Channel bank erosion south bank downstream. 5/2016 - Some minor inward movement of both abutments. Pile #3 north abutment split at the top and open 1".

Alert Code 2: 10/2010 - Piles 3, 4 & 5 south abutment split & open to 2", pile #2 split @ the top & open to 1/2".

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-102-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	44.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	GARDAR TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 1 WEST GARDAR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 33' 27.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 54' 23.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	580690.7 5378854.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 12 22 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 7 14 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	214 Gravel/Dirt	209 Posted in "Tons"	18 Tons
Age and Service		Appraisal	
27 Yr Built	1946 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	8 Desirable Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	20 30 Year of ADT 2014	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 25, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	31.8 Ft.	Other Special	N
48 Length of Max Span	21 Ft.	218 Channel Profile	1 48 05/19/2015
49 Structure Length	22.97 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	06/03/2014
51 Bridge Rdwy Width - Curb to Curb	32.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-102-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	732	95	695	5	37	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	37	0	0	100	37	0	0	0	0
Notes:_										
107/2:Steel Opn Girder/Beam	ft	299	0	0	0	0	100	299	0	0
1000/2:Corrosion	ft	299	0	0	0	0	100	299	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:_										
215/2:Re Conc Abutment	ft	66	20	13	68	45	6	4	6	4
1130/2:Cracking (RC and Other)	ft	8	0	0	0	0	50	4	50	4
Notes:_										
331/1:Re Conc Bridge Railing	ft	46	0	0	100	46	0	0	0	0
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
8401/2:Wings	each	4	0	0	50	2	50	2	0	0

Remarks: 11/13/2002 - East abutment moved in 10". West abutment moved in 7 1/4". Abutment settling in center due to large crack now open 1" at water line. 11/09/2006 - West abutment now moved 8" measured at center.
 12/09/2008 - Abutment movement unchanged. NBI Remarks: No railings. Minor section loss lower portion east abutment. Rusting girders. Channel bank erosion both sides of structure. Minor roadway embankment settlement at the NE corner east abutment. Channel runs along the east abutment.

Alert Code 1: Vertical crack in center of east abutment open 1 1/2" at bottom. Center of east abutment bowed in 1" to 2".

Alert Code 2: 10/2010 - Both abutments have moved in with settlement to the center of the east abutment. East abutment moving in 11" and west abutment moved in 9" measured at center, a change from 10" and 8" in 2008.5/8/12 - Continued inward movement both abutments, east moved in 12" and west moved in 10", measured @ center.5/6/14 - No change in inward movement.5/2016 - East abutment moved in 13.5" a change from 12" in 2014. No change in west abutment. Structure not posted on west end.4/2018 - Continued inward movement both abutments, east moved in 10 3/4" and west moved in 14",

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-103-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	GARDAR TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NORTH FORK PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF GARDAR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 35' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 53' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	582280.3 5382759.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	6 Corrugated Steel	64 Oper. Rating	HS 55 99 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 35 64 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	204 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1981 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	10 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 25, 2018
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	30.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	25.9 Ft.	Other Special	N
48 Length of Max Span	21 Ft.	218 Channel Profile	1 48 05/19/2015
49 Structure Length	45.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	02/08/2017
51 Bridge Rdwy Width - Curb to Curb	26.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-103-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
30/1:Steel Deck - Orthotropic	sq.ft	1,292	100	1,292	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	1,292	100	1,292	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	614	76	464	16	100	8	50	0	0
1000/2:Corrosion	ft	150	0	0	67	100	33	50	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	75	75	25	25
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	75	75	25	25
Notes:_										
206/3:Timber Column	each	21	100	21	0	0	0	0	0	0
216/2:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	85	0	0	0	0	100	85	0	0
1000/2:Corrosion	ft	85	0	0	0	0	100	85	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:_										
332/1:Timb Bridge Railing	ft	92	99	91	1	1	0	0	0	0
1150/1:Check/Shake	ft	1	0	0	100	1	0	0	0	0
Notes:_										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Bank erosion south bank both sides of structure. No railings. Channel runs through the south span with some undermining of the south abutment. Some inward movement top of south abutment. Poor channel alignment from the west.

Alert Code 1: 4/2018 - Large tree branch lodged against west side center pier brace.

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SEC 409

Structure Number: 34-103-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	54.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	GARDAR TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH OF GARDAR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 33' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 53' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	581978.9 5378873.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 14 25 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 4 9 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	212 Gravel/Dirt	209 Posted in "Tons"	21 Tons
Age and Service		Appraisal	
27 Yr Built	1939 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	35 30 Year of ADT 2014	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 25, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	30.2 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 05/19/2015
49 Structure Length	25.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	30.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-103-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	786	100	786	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	335	0	0	0	0	100	335	0	0
1000/2:Corrosion	ft	335	0	0	0	0	100	335	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
215/2:Re Conc Abutment	ft	59	92	54	8	5	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
Notes: _										
331/1:Re Conc Bridge Railing	ft	52	0	0	100	52	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Slight sag in steel girders. No railings. Channel bank erosion east bank with tree debris in channel both sides of structure. Rusty girders. Minor erosion behind northeast wing. 5/2016 - Top of NW corner of west abutment footing exposed.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-103-31.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	68.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	GARDAR TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH OF GARDAR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 33' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 53' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	582338.5 5379825.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Slab		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 39 71 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 20 37 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	218 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1930 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	10 30 Year of ADT 2014	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 25, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.6 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/19/2015
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 34-103-31.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
38/1:Re Concrete Slab	sq.ft	603	97	583	0	0	3	20	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	20	0	0	0	0	100	20	0	0
Notes: _										
215/3:Re Conc Abutment	ft	49	6	3	67	33	22	11	4	2
1080/3:Delamination/Spall/Patched Area	ft	10	0	0	70	7	30	3	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	36	0	0	72	26	22	8	6	2
Notes: _										
330/1:Metal Bridge Railing	ft	49	0	0	0	0	100	49	0	0
1000/1:Corrosion	ft	14	0	0	0	0	100	14	0	0
Notes: _										
1900/1:Distortion	ft	35	0	0	0	0	100	35	0	0
Notes: _										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
8401/2:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: Date 12/02/2004 - 14" inward movement of south abutment. South abutment settled approx. 1 1/2". 11/09/2006 - No change in movements. NBI Remarks: Poor horizontal roadway alignment. Concrete spalling along bridge seat south abutment. Vehicle damage to west railing. Southeast wing spall exposing reinforcing steel. Erosion behind southwest wing. Channel bank sloughing up & downstream both sides of bridge. Sediment buildup under structure. Channel runs along north abutment. Beaver dam just east of structure.

Alert Code 1: Open vertical cracks south abutment-center crack open 1" to 1 1/2", west crack 1/4". South abutment bows in approximately 2" - 3" @ center.

Alert Code 2: South abutment moved inward 14". 5/8/12 - South abutment moved inward 15" measured @ the SW corner - continued inward movement of the south abutment. 5/2/2014 - South abutment moved inward 17" measured @ southwest corner - continued inward movement of south abutment observed in 2014. 5/2016 - No additional inward movement observed in 2016 or 2018. Open vertical cracks south abutment-center crack open 1" to 1 1/2", west crack 1/4". South abutment bows in approximately 2" - 3" @ center.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-105-21.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	THINGVALLA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 1 NORTH MOUNTAIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 42' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 50' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	585319.1 5395047.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 27 48 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 16 29 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	26 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 18, 2018
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/20/2015
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	02/09/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sourm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-105-21.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	721	97	697	0	0	3	24	0	0
1170/1:Split/Delamination (Timber)	sq.ft	24	0	0	0	0	100	24	0	0
Notes: _										
107/2:Steel Opn Girder/Beam	ft	358	0	0	0	0	100	358	0	0
1000/2:Corrosion	ft	358	0	0	0	0	100	358	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes: _										
206/2:Timber Column	each	12	92	11	8	1	0	0	0	0
1170/2:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes: _										
216/3:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
231/2:Steel Pier Cap	ft	49	0	0	0	0	100	49	0	0
1000/2:Corrosion	ft	49	0	0	0	0	100	49	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes: _										
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb, railings. Top wing plank on SW wing cracked. Drop structure approximately 300' east. Lower backwall plank northwest corner at water line separating approximately 4". 10/2010 - Vehicle damage with cracked plank north end of deck. 5/2016 - Both top planks replaced at the wings.

Alert Code 1: 30' x 24' x 3.0' deep scour hole under structure. North abutment backwall planks separating near bottom with roadway filtration. See Photos.Pile #3 north abutment split at the top and open 1/2" down to 3'.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-105-21.3

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	THINGVALLA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 1 EAST MOUNTAIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 42' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 51' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	584444.5 5395013.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 29 53 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 17 32 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1960 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT 2014	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	May 09, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.4 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	22.50 Ft.	218 Channel Profile	1 48 05/20/2015
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	02/09/2017
	22.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	23.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sourm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-105-21.3

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	517	94	487	4	20	2	10	0	0
1170/1:Split/Delamination (Timber)	sq.ft	10	0	0	0	0	100	10	0	0
Notes:_										
1180/1:Abrasion	sq.ft	20	0	0	100	20	0	0	0	0
Notes:_										
107/2:Steel Opn Girder/Beam	ft	259	0	0	80	207	20	52	0	0
1000/2:Corrosion	ft	259	0	0	80	207	20	52	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:_										
206/3:Timber Column	each	12	0	0	100	12	0	0	0	0
216/3:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
231/2:Steel Pier Cap	ft	49	0	0	100	49	0	0	0	0
1000/2:Corrosion	ft	49	0	0	100	49	0	0	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:_										
332/1:Timb Bridge Railing	ft	46	100	46	0	0	0	0	0	0
8401/2:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: NBI Remarks: No railings. Poor horizontal roadway alignment. Drop structure approx. 400' east. Top of southeast wing pile missing. Top of northwest wing pile damaged & top plank damaged. Top plank of east abutment tilting back. Rotting wing piling. Channel bank erosion near northwest wing. 5/2016 - In 2015 County forces replaced 2 deck planks both ends. Installed BEM'S, new curb, and placed gravel both ends. 4/2018 - One BEM missing west end.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-105-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	GARDAR TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NORTH FORK PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST OF GARDAR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 35' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 50' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	585616.3 5382362.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 25 45 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 15 28 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1988 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	2 30 Year of ADT 2014	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 25, 2018
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.6 Ft.	Other Special	N
48 Length of Max Span	41 Ft.	218 Channel Profile	1 48 05/20/2015
49 Structure Length	42.98 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.3 Ft Lt-Side	212 Structure Load Rated	02/09/2017
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-105-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,292	100	1,292	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	525	0	0	0	0	100	525	0	0
1000/2:Corrosion	ft	525	0	0	0	0	100	525	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
206/3:Timber Column	each	14	86	12	14	2	0	0	0	0
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	59	0	0	0	0	100	59	0	0
1000/2:Corrosion	ft	59	0	0	0	0	100	59	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
332/1:Timb Bridge Railing	ft	85	76	65	0	0	24	20	0	0
1140/1:Decay/Section Loss	ft	20	0	0	0	0	100	20	0	0
Notes: _										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railings. Poor vertical and horizontal roadway alignment. Some deck planks replaced in 2007. Northwest abutment pile #1 split and open to 2" at the top. Northeast abutment pile #7 split and open to 1/2" @ the top. 5/2016 - Channel runs along the south abutment undermining the SE corner to a depth of 1'.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-106-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	THINGVALLA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 NORTH MOUNTAIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 42' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 49' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	586934.1 5395204.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	6 Corrugated Steel	64 Oper. Rating	HS 26 47 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 15 28 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	24 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic		36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 18, 2018
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/20/2015
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	02/09/2017
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sourm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-106-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
30/1:Steel Deck - Orthotropic	sq.ft	667	100	667	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	667	100	667	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	328	0	0	0	0	100	328	0	0
1000/2:Corrosion	ft	328	0	0	0	0	100	328	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
206/3:Timber Column	each	10	100	10	0	0	0	0	0	0
216/2:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
231/2:Steel Pier Cap	ft	49	0	0	0	0	100	49	0	0
1000/2:Corrosion	ft	49	0	0	0	0	100	49	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
7362/2:Superstructure Traffic Impact	each	1	0	0	100	1	0	0	0	0
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
6000/2:Scour	each	1	0	0	100	1	0	0	0	0
Notes: _										

Remarks: NBI Remarks: No railings. No curb. No BEM's. Riprap added to west side of structure near wings. South channel bank erosion downstream.

Alert Code 1: Scour hole under structure, 24' x 26' x 3.0' deep. Ice damage to east outside girder.5-1-14 - Channel bank erosion near northwest wing.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-106-23.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	THINGVALLA TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CART CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST OF MOUNTAIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 40' 60.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 49' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	586970.0 5392920.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 26 46 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 15 28 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	205 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1942 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	24 30 Year of ADT 2014	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 01, 2018
32 Approach Roadway Width	17 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/20/2015
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.3 Ft Lt-Side	212 Structure Load Rated	06/19/2018
51 Bridge Rdwy Width - Curb to Curb	23.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-106-23.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	592	100	592	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	331	0	0	0	0	100	331	0	0
1000/2:Corrosion	ft	331	0	0	0	0	100	331	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
206/2:Timber Column	each	12	92	11	8	1	0	0	0	0
1160/2:Crack (Timber)	each	1	0	0	100	1	0	0	0	0
216/2:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	49	0	0	50	25	50	25	0	0
1000/2:Corrosion	ft	49	0	0	50	25	50	25	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	50	50	50	50
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	50	50	50	50
Notes: _										
332/1:Timb Bridge Railing	ft	49	0	0	100	49	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Rusty girders. No railings. Channel bank erosion downstream. Channel runs along south abutment. 6/2016 - No BEM'S.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-107-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	48.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	GARDAR TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NORTH FORK PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST OF GARDAR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 35' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 47' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	588739.7 5382546.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 8 15 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 3 7 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	205 Gravel/Dirt	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1942 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	10 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 25, 2018
32 Approach Roadway Width	15 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	20.7 Ft.	Other Special	N
48 Length of Max Span	17 Ft.	218 Channel Profile	1 48 05/20/2015
49 Structure Length	36.09 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	02/10/2017
51 Bridge Rdwy Width - Curb to Curb	20.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-107-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	797	97	777	3	20	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	20	0	0	100	20	0	0	0	0
Notes:_										
107/2:Steel Opn Girder/Beam	ft	338	0	0	0	0	100	338	0	0
1000/2:Corrosion	ft	338	0	0	0	0	100	338	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:_										
215/3:Re Conc Abutment	ft	43	74	32	0	0	26	11	0	0
1080/3:Delamination/Spall/Patched Area	ft	4	0	0	0	0	100	4	0	0
Notes:_										
1130/3:Cracking (RC and Other)	ft	7	0	0	0	0	100	7	0	0
Notes:_										
231/2:Steel Pier Cap	ft	23	0	0	0	0	100	23	0	0
1000/2:Corrosion	ft	11	0	0	0	0	100	11	0	0
Notes:_										
1900/2:Distortion	ft	12	0	0	0	0	100	12	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:_										
331/1:Re Conc Bridge Railing	ft	72	93	67	3	2	0	0	4	3
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:_										
1090/1:Exposed Rebar	ft	3	0	0	0	0	0	0	100	3
Notes:_										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railings. Poor channel alignment. Vertical cracks north abutment. Cracks & spalling with 2" inward movement southwest corner. Diagonal cracking in the south abutment leading from the top of southwest corner. Two feet of curb spalling and breaking away in the southwest corner. 4/2018 - posted sign missing south end. No BEM'S south end. Posted 4/18/19 per LG nmh - photo shows branches need trimming

Alert Code 1: Severe channel bank erosion both sides of structure. Channel bank erosion near both north wings. 4/2018 - large amount of tree drift west side span #1. Steel pier cap twisting from center pier column to east end.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-108-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	PARK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CART CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 1 SOUTH MOUNTAIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 39' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 46' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	590161.7 5390282.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 25 45 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 15 27 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	100 None	209 Posted in "Tons"	26 Tons
Age and Service		Appraisal	
27 Yr Built	1977 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	5 30 Year of ADT 2014	72 App. Rdwy. Alignment	3 Intolerable - Correct
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 01, 2018
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.3 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/20/2015
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	02/10/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-108-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	743	100	743	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	476	0	0	100	476	0	0	0	0
1000/2:Corrosion	ft	476	0	0	100	476	0	0	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes: _										
206/3:Timber Column	each	12	83	10	17	2	0	0	0	0
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes: _										
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	49	0	0	0	100	49	0	0	0
1000/2:Corrosion	ft	49	0	0	0	100	49	0	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
332/1:Timb Bridge Railing	ft	62	82	51	0	0	18	11	0	0
1140/1:Decay/Section Loss	ft	11	0	0	0	0	100	11	0	0
Notes: _										
8401/2:Wings	each	4	75	3	25	1	0	0	0	0

Remarks: NBI Remarks: No railings. Poor channel alignment. Poor horizontal roadway alignment. Fire damage to northeast wing plank. End pile southwest corner split & open to 3/4". End pile northeast corner split & open to 1/2". 5/1/14 - Overburden removed from deck. Posted signs visible from the south & east, no sign visible from the north. 6/2016 - NE wing repaired in 2015. Channel bank erosion front of SW wing. Rerated and no longer to be posted Bridge Division

Alert Code 1: 6/2016 - Scour hole along south abutment, 20 x 30 x 2' deep.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-108-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	CRYSTAL TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NORTH FORK PARK	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST OF GARDAR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 35' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 47' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	589635.5 5382212.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 20 37 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 12 22 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	23 Tons
Age and Service		Appraisal	
27 Yr Built	1943 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	10 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 25, 2018
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.6 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/20/2015
49 Structure Length	30.60 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.5 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.5 Ft Lt-Side	212 Structure Load Rated	02/10/2017
51 Bridge Rdwy Width - Curb to Curb	23.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-108-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	734	100	734	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	459	96	439	0	0	4	20	0	0
1900/2:Distortion	ft	10	0	0	0	0	100	10	0	0
Notes:_										
7000/2:Damage	ft	10	0	0	0	0	100	10	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:_										
206/2:Timber Column	each	12	100	12	0	0	0	0	0	0
216/2:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	49	0	0	0	0	100	49	0	0
1000/2:Corrosion	ft	49	0	0	0	0	100	49	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:_										
332/1:Timb Bridge Railing	ft	60	100	60	0	0	0	0	0	0
7362/2:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor fire damage to northeast wing and pile. Rusty girders. Ice damage bending the bottom flange of girders 3 and 4 from the north. Severe channel bank erosion to both banks south of structure and east bank north of structure. Embankment erosion behind both west abutment corners exposing backwall planks. Utility conduit attached to north side of deck. Slope protection both abutments settled & displaced. Some pitting to bottom flange to most beams near both abutments. 5/25/2012 - West end posted sign missing. 4/2018 - New deck and curb repair in 2017.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-108-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	69.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	CRYSTAL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NORTH FORK PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 1 SOUTH GARDAR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 34' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 46' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	590323.0 5381260.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 35 63 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 21 38 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1954 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	10 30 Year of ADT 2014	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 01, 2018
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 05/20/2015
49 Structure Length	41.01 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	02/10/2017
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-108-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	980	100	980	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	495	0	0	100	495	0	0	0	0
1000/2:Corrosion	ft	495	0	0	100	495	0	0	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:_										
206/2:Timber Column	each	12	58	7	33	4	0	0	8	1
1140/2:Decay/Section Loss	each	5	0	0	80	4	0	0	20	1
Notes:_										
216/2:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	49	0	0	0	0	100	49	0	0
1000/2:Corrosion	ft	49	0	0	0	0	100	49	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:_										
332/1:Timb Bridge Railing	ft	82	100	82	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railing. Trees and vegetation growth by bridge east side. Concrete chunks placed @ all wing corners. Channel runs along the south abutment. 5/2016 - New timber curb west side in 2015.

Alert Code 1: 5/2016 - Scour hole along south abutment 10' x 10' x 2' deep.

Alert Code 2: Severe channel bank erosion south bank east and west of structure. Pile #5 south abutment cracked and pile #2 north abutment rotting. Piles #3 - #6 south abutment are rotting near the waterline.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-109-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	PARK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 1 NORTH MOUNTAIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 42' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 45' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	591125.5 5395129.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 27 48 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 16 29 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1946 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	5 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 18, 2018
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/20/2015
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	02/10/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sourm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-109-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	592	100	592	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	308	0	0	0	0	100	308	0	0
1000/2:Corrosion	ft	308	0	0	0	0	100	308	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
206/3:Timber Column	each	12	0	0	8	1	92	11	0	0
1140/3:Decay/Section Loss	each	11	0	0	0	0	100	11	0	0
Notes: _										
1170/3:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes: _										
216/3:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1140/3:Decay/Section Loss	ft	49	0	0	100	49	0	0	0	0
Notes: _										
231/2:Steel Pier Cap	ft	49	0	0	0	0	100	49	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railings. No curb. Piling and plank in abutments are setting in water and are rotting lower portion. 11/2010 - No BEM's. 5/7/2014 - No BEM's. In 2013 county forces replaced 5 deck planks east end & 1 deck plank west end. Rock riprap added @ northwest wing. Road gravel added @ both ends.

Alert Code 1: 11/2010 - Scour hole under structure 20' x 20' x 3.0' deep. Piling and plank in abutments are setting in water and are rotting lower portion.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-109-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	PARK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 1 NORTH MOUNTAIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 41' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 45' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	591716.0 5394514.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 28 51 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 17 31 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	210 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1976 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	15 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 18, 2018
32 Approach Roadway Width	13 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.2 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 05/20/2015
49 Structure Length	25.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	02/10/2017
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sourm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-109-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	721	58	421	42	300	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	300	0	0	100	300	0	0	0	0
Notes:_										
107/2:Steel Opn Girder/Beam	ft	344	0	0	0	0	100	344	0	0
1000/2:Corrosion	ft	344	0	0	0	0	100	344	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:_										
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	56	0	0	0	0	100	56	0	0
1000/2:Corrosion	ft	56	0	0	0	0	100	56	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:_										
332/1:Timb Bridge Railing	ft	52	100	52	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railings. Channel runs along the south abutment. Rusty girders. North channel bank erosion downstream & near the northeast wing corner. Channel bank erosion near 3 of 4 wings - worse near the northeast wing corner - See photo. 4/2018 - Three BEM's missing.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-109-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	71.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	PARK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CART CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 3 NORTH GARDAR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 38' 40.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 45' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	591496.3 5388684.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 20 37 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 12 23 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	26 Tons
Age and Service		Appraisal	
27 Yr Built	1977 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	40 30 Year of ADT 2014	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 19, 2018
32 Approach Roadway Width	17 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.7 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	1 48 05/20/2015
49 Structure Length	36.09 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	02/10/2017
51 Bridge Rdwy Width - Curb to Curb	22.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sourm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-109-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	872	0	0	100	872	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	440	0	0	100	440	0	0	0	0
1000/2:Corrosion	ft	440	0	0	100	440	0	0	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes: _										
206/3:Timber Column	each	12	83	10	0	0	17	2	0	0
1170/3:Split/Delamination (Timber)	each	2	0	0	0	0	100	2	0	0
Notes: _										
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	49	0	0	0	0	100	49	0	0
1000/2:Corrosion	ft	49	0	0	0	0	100	49	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
332/2:Timb Bridge Railing	ft	72	100	72	0	0	0	0	0	0
Notes: _										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railings. Old piling in channel by west abutment. Poor channel alignment to south. Top plank on southwest wing broken off. 11/2010 - Erosion behind both north wings. Beaver dam just south of structure. 5/7/2014 - County forces replaced timber curb both sides.

Alert Code 2: 5/2016 - Embankment erosion behind north wings encroaching near roadway behind the NW wing. 4/2018 - One split pile center of east abutment open 3" at top. Second pile from south in the west abutment split and open at the top 5". Beaver dam south of structure.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-109-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	CRYSTAL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 1 SOUTH GARDAR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 34' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 45' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	591933.6 5381446.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 26 47 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 15 28 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1967 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	2 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 01, 2018
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.0 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 05/20/2015
49 Structure Length	32.15 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	02/10/2017
51 Bridge Rdwy Width - Curb to Curb	22.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-109-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	710	0	0	98	695	1	10	1	5
1140/1:Decay/Section Loss	sq.ft	15	0	0	0	0	67	10	33	5
Notes: _										
107/2:Steel Opn Girder/Beam	ft	318	0	0	41	129	59	189	0	0
1000/2:Corrosion	ft	318	0	0	41	129	59	189	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	8	8	41	41	51	51	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	8	8	41	41	51	51	0	0
Notes: _										
206/3:Timber Column	each	10	80	8	20	2	0	0	0	0
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
216/3:Timber Abutment	ft	43	100	43	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	43	0	0	0	0	100	43	0	0
1000/2:Corrosion	ft	43	0	0	0	0	100	43	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railings. No curbs. No bridge end markers. Rusty girders. Channel runs along the south abutment. 5/2016 - Some areas of rotting deck planks. Tree debris removed at both ends and deck planks replaced in 2015. 5/2018 - Piles 3 & 4 south abutment split at top and open to 4" down at center.

Alert Code 1: 5/2018 - Bump at north end at bridge.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-110-22.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Major Collector
04 City	PARK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03424 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST OF HENSEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.598	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 41' 17.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 44' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	592661.5 5393538.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1950 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	240 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	9.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	11 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 02, 2016
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	38.7 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	Y 48 07/01/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
TRIPLE, 10'X7'X37' RCB			

Structure Number: 34-110-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	258	100	258	0	0	0	0	0	0
Notes: _										
107/2:Steel Opn Girder/Beam	ft	217	0	0	0	0	100	217	0	0
1000/2:Corrosion	ft	217	0	0	0	0	100	217	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes: _										
241/3:Re Conc Culvert	ft	112	87	97	0	0	13	15	0	0
1080/3:Delamination/Spall/Patched Area	ft	10	0	0	0	0	100	10	0	0
Notes: _										
1090/3:Exposed Rebar	ft	2	0	0	0	0	100	2	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	3	0	0	0	0	100	3	0	0
Notes: _										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Heavy vegetation growth in channel north side. Minor cracking in south headwall and all wing corners. Vertical cracks in all walls. Structure widened 3 1/2 ft. each side with steel girders. In summer 1988. Exposed edge of floor on south end of box. Sediment & vegetation buildup north end of west & east barrels - channel flows thru center barrel. Cracking, spalling with exposed rebar northeast wing corner. - See photo. 5/2016 - West end BEM missing. One spall area lower portion east outside wall south end.

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Structure Number: 34-110-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	PARK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CART CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 2 NORTH CRYSTAL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 37' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 44' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	592932.8 5387101.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 31 Tons
208 Dk Overburden	201 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2014	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	May 01, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	1 48 05/20/2015
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	25.9 Ft.	212 Structure Load Rated	09/06/2016
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Structure Number: 34-110-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
15/2:Pre Concrete Top Flange	sq.ft	1,117	100	1,117	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	262	100	262	0	0	0	0	0	0
206/2:Timber Column	each	14	100	14	0	0	0	0	0	0
216/2:Timber Abutment	ft	30	100	30	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	30	100	30	0	0	0	0	0	0
333/1:Other Bridge Railing	ft	79	100	79	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railings. Channel bank erosion downstream.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-110-28.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Major Collector
04 City	CRYSTAL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03411 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CART CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 1 NORTH CRYSTAL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	4.699	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 36' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 43' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	593475.9 5385330.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 60 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 15 29 Tons
208 Dk Overburden	302 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	175 30 Year of ADT 2014	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	11.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 01, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.5 Ft.	Underwater	N
48 Length of Max Span	54 Ft.	Other Special	N
49 Structure Length	57.09 Ft.	218 Channel Profile	1 48 05/20/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.2 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.2 Ft.	213 Federal Aid Project Number	BRS-3411(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 34-110-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	732	100	732	0	0	0	0	0	0
510/2:Wearing Surfaces	sq.ft	732	84	612	16	120	0	0	0	0
3220/2:Crack (Wearing Surface)	sq.ft	120	0	0	100	120	0	0	0	0
104/2:Pre Clsd Box Girder	ft	541	100	541	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	115	100	115	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	115	100	115	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Channel banks eroding upstream & downstream. Riprap displaced under structure north abutment with exposed footing. Old concrete abutment in channel near north abutment. Rock riprap added along north channel bank near NW corner of abutment & wing - See photos.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-110-30.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Major Collector
04 City	CRYSTAL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03411 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 2 SOUTH OF CRYSTAL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.200	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 34' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 43' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	593549.4 5381001.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	44 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	27 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	309 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1967 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	200 30 Year of ADT 2014	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	15.00	36 Traffic Safety Features	1 1 1 1
19 Bypass, Detour Length	10 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 01, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	31.8 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	1 48 05/20/2015
49 Structure Length	37.07 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	08/21/2017
51 Bridge Rdwy Width - Curb to Curb	31.8 Ft.	213 Federal Aid Project Number	
52 Deck Width	33.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-110-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,238	100	1,238	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	1,238	100	1,238	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	584	0	0	100	584	0	0	0	0
1900/2:Distortion	ft	584	0	0	100	584	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	75	75	25	25	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	75	75	25	25	0	0	0	0
Notes: _										
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	75	100	75	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Both outside girders bowed outward approximately 1". 11/2010 - Vehicle damage SW end terminal. Channel runs along south abutment. 5/2016 - Sediment buildup under structure and along the north abutment. 5/2018 - Channel bank erosion at both wings with tree debris buildup at both west wings.

Alert Code 1: All girders sagging from 1/2" outer girders to a maximum of one inch to the interior girders.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-111-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	CRYSTAL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	IORTH BRANCH PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 2 SOUTH OF CRYSTAL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 34' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 43' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	593686.5 5380668.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 50 90 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 28 51 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1967 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	10 30 Year of ADT 2014	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 01, 2018
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	20.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.3 Ft.	Other Special	N
48 Length of Max Span	21 Ft.	218 Channel Profile	1 48 06/08/2015
49 Structure Length	43.96 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	22.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-111-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	980	100	980	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	518	0	0	90	468	10	50	0	0
1000/2:Corrosion	ft	515	0	0	91	468	9	47	0	0
Notes: _										
1900/2:Distortion	ft	3	0	0	0	0	100	3	0	0
515/2:Steel Protective Coating	sq.ft	100	90	90	10	10	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	90	90	10	10	0	0	0	0
Notes: _										
206/3:Timber Column	each	18	94	17	6	1	0	0	0	0
1170/3:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
216/3:Timber Abutment	ft	46	100	46	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	75	0	0	0	0	100	75	0	0
1000/2:Corrosion	ft	75	0	0	0	0	100	75	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes: _										
8401/3:Wings	each	4	50	2	50	2	0	0	0	0

Remarks: 12/17/2008 - Caps sagged (channel iron) between piles #1 & #2 from north. NBI Remarks: No railings. No curbs. No bridge end markers east end. Rotted piling and planks northeast wing. Bank erosion near southwest wing. Rotted wing pile in the northwest wing. Top plank NE wing damaged. 5/2016 - Three areas of the bottom flange bent up south outside beam. Debris build up between girders.

Alert Code 1: Pier cap sagging between piles 1 & 2 north side.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-111-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	CRYSTAL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	IORTH BRANCH PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 3 SOUTH CRYSTAL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 33' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 42' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	595197.6 5379084.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 22 40 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 13 24 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1948 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	5 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 10, 2018
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.3 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 06/08/2015
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	02/10/2017
51 Bridge Rdwy Width - Curb to Curb	24.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-111-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	775	94	725	6	50	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	50	0	0	100	50	0	0	0	0
Notes: _										
107/2:Steel Opn Girder/Beam	ft	446	0	0	48	212	52	234	0	0
1000/2:Corrosion	ft	446	0	0	48	212	52	234	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	48	48	52	52	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	48	48	52	52	0	0
Notes: _										
215/3:Re Conc Abutment	ft	52	58	30	42	22	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	22	0	0	100	22	0	0	0	0
Notes: _										
331/1:Re Conc Bridge Railing	ft	59	85	50	0	0	15	9	0	0
1080/1:Delamination/Spall/Patched Area	ft	9	0	0	0	0	100	9	0	0
Notes: _										
8401/2:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: NBI Remarks: No railings. Channel bank erosion up & downstream. Scaling lower portion south abutment. Scaling under beams NW corner north abutment. Structure posted for 10 tons.

Alert Code 1: Bump @ bridge ends.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-112-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	PARK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 SOUTH OF HENSEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 40' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	596582.9 5391732.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	9 No Deficiencies
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 39 70 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 23 42 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	5 30 Year of ADT 2014	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 19, 2018
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	20 Ft.	218 Channel Profile	1 48 06/08/2015
49 Structure Length	22.97 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	02/10/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sourm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-112-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	549	100	549	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	220	0	0	100	220	0	0	0	0
1000/2:Corrosion	ft	220	0	0	100	220	0	0	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:_										
206/3:Timber Column	each	12	92	11	0	0	0	0	8	1
1160/3:Crack (Timber)	each	1	0	0	0	0	0	0	100	1
Notes:_										
216/3:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1900/3:Distortion	ft	49	0	0	100	49	0	0	0	0
Notes:_										
231/2:Steel Pier Cap	ft	49	0	0	0	0	100	49	0	0
1000/2:Corrosion	ft	49	0	0	0	0	100	49	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:_										
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
Notes:_										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railings. No curbs. 5/7/2014 - County forces added some new wing planks to 3 of 4 wings. County forces repaired erosion areas near north wings & north channel bank near structure. Rock riprap added @ both north wings - See photos. Some bowing inward lower portion both abutments. 5/2016 - in 2015 under contract channel clean out, repaired both end deck planks, added riprap to the south wings, thru channel under structure. Riprap spillway 300' east of structure. Metal culverts added under approaches west side near structure. Spillway 1000' west of structure.

Alert Code 1: Pile #4 south abutment cracking at the water line - See photo.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-112-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	CRYSTAL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CART CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF CRYSTAL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 36' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	596720.9 5383952.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 27 48 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 16 29 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1952 106 Yr Reconstructed	1974	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	90 30 Year of ADT	2014	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	May 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.6 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 06/08/2015
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	26.6 Ft.	212 Structure Load Rated	02/10/2017
52 Deck Width	28.5 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-112-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,442	0	0	100	1,442	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	751	0	0	100	751	0	0	0	0
1000/2:Corrosion	ft	751	0	0	100	751	0	0	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes: _										
206/3:Timber Column	each	21	95	20	5	1	0	0	0	0
1170/3:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes: _										
216/2:Timber Abutment	ft	30	100	30	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	89	0	0	0	0	100	89	0	0
1000/2:Corrosion	ft	89	0	0	0	0	100	89	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
332/1:Timb Bridge Railing	ft	98	49	48	0	0	51	50	0	0
1020/1:Connection	ft	25	0	0	0	0	100	25	0	0
Notes: _										
7000/1:Damage	ft	25	0	0	0	0	100	25	0	0
Notes: _										
8398/1:Slope Protection	each	2	0	0	50	1	0	0	50	1
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railings. Diagonal braces on center pier broken with section missing due to ice damage. Rusty girders. Old piling in channel restricting flow. Pile #5 north abutment split near top & open to 3/4" +/- . Vehicle damage to east side timber curb south end. 6/2016 - South abutment riprap settled and displaced.

Alert Code 1: Girder #7 in the south span misaligned and touches girder #8 over pier. Erosion of north abutment embankment under the bottom plank along entire abutment. Scour hole under structure 25' x 40' x 3' deep. Some minor roadway filtration under bottom south abutment plank.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-112-32.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	CRYSTAL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect IORTH BRANCH PARK RIVER		102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 3 SOUTH OF CRYSTAL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 33' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	596806.2 5379026.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 30 55 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 18 33 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	24 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 10, 2018
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	10.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 06/08/2015
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	02/10/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-112-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	764	100	764	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	367	0	0	0	0	100	367	0	0
1000/2:Corrosion	ft	367	0	0	0	0	100	367	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
215/2:Re Conc Abutment	ft	49	0	0	100	49	0	0	0	0
1900/2:Distortion	ft	49	0	0	100	49	0	0	0	0
Notes: _										
331/1:Re Conc Bridge Railing	ft	59	93	55	0	0	0	0	7	4
1080/1:Delamination/Spall/Patched Area	ft	4	0	0	0	0	0	0	100	4
Notes: _										
4000/3:Settlement	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	50	2	50	2	0	0	0	0

Remarks: 12/17/2008 - Lean measurements on abutments unchanged. NBI Remarks: No railings. Channel erosion upstream and downstream. Cracking with minor spalls between girders both abutments. Small diagonal cracks in abutment wall toward wing corners both abutments. Channel bank erosion near the northeast wing. 11/2010 - No change in lean. 6/2016 - Two BEM'S missing. 5/2018 - 30' x 40' x 2.5' deep scour hole along south abutment.

Alert Code 1: South abutment moving in at the bottom and leaning away 3" in 4' north abutment moving in at the bottom and leaning 1 1/4" in 4'. Top portion of both north wings breaking away exposing reinforcing steel. Top of north abutment moving in approximately 2" - 3". 5/12/2012 - No change in lean measurements. 5/6/2014 , 2016 or in 2018.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-113-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	PARK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH OF HENSEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 40' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	598206.0 5391703.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	9 No Deficiencies
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 39 71 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 23 43 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	204 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	100 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 19, 2018
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	21 Ft.	218 Channel Profile	1 48 06/08/2015
49 Structure Length	22.97 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	02/13/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sourm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-113-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	560	100	560	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	230	0	0	100	230	0	0	0	0
1000/2:Corrosion	ft	230	0	0	100	230	0	0	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes: _										
206/3:Timber Column	each	12	83	10	17	2	0	0	0	0
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes: _										
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	49	0	0	100	49	0	0	0	0
1000/2:Corrosion	ft	49	0	0	100	49	0	0	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
Notes: _										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railings. No curb. Minor damage to tops of all wing pile. 5/1/14 - Two BEM's missing. County forces added riprap near northeast wing. Channel bank erosion behind southwest wing - See photos. Drop structure approximately 700' downstream. 5/2016 - In 2015 county added riprap to NW,SE and SW wing corners thru channel west side under structure. Channel cleanout and new approach pipe added near SW wing. 4/2018 - Piles #2 & #3 south abutment split at the top and open to 1" down to 2'.

Alert Code 1: 4/2018 - Piles #2 & #3 south abutment split at the top and open to 1" down to 2'.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-113-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	CRYSTAL CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CART CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6TH STREET IN CRYSTAL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 35' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 598359.2 5382571.7		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type :stressed concrete continuous		61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type 1 Concrete-Cast-in-Place		63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface 1 Monolithic Concrete		64 Oper. Rating HS 51	93 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating HS 24	44 Tons
208 Dk Overburden 1	None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1990 106 Yr Reconstructed -1		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 130 30 Year of ADT 2014		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	19.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	May 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	49 Ft.	Other Special	N
49 Structure Length	104.00 Ft.	218 Channel Profile	1 48 06/08/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	27.9 Ft.	213 Federal Aid Project Number	BRO-34(7)
52 Deck Width	31.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-113-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,240	100	3,240	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	387	100	387	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	203	100	203	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	207	100	207	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-113-29.2

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	46.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	CRYSTAL CITY	37 Historical Significance	1 Br on Natl Reg Hist PI
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CART CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	APPLETON AVENUE CRYSTAL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 35' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 40' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	597888.9 5383501.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 42 77 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 15 28 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	302 Asphalt	209 Posted in "Tons"	05 Tons
Age and Service		Appraisal	
27 Yr Built	1927 106 Yr Reconstructed	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	120 30 Year of ADT 2014	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	8.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	1 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 19, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.7 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 07/01/2008
49 Structure Length	64.96 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	4.6 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	19.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sourm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 34-113-29.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,701	95	1,616	5	85	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	85	0	0	100	85	0	0	0	0
Notes: _										
510/1:Wearing Surfaces	sq.ft	1,701	99	1,686	0	0	1	15	0	0
110/2:Re Conc Opn Girder/Beam	ft	302	100	302	0	0	0	0	0	0
205/3:Re Conc Column	each	2	0	0	0	0	100	2	0	0
1080/3:Delamination/Spall/Patched Area	each	2	0	0	0	0	100	2	0	0
Notes: _										
210/3:Re Conc Pier Wall	ft	26	0	0	100	26	0	0	0	0
215/2:Re Conc Abutment	ft	52	0	0	0	0	6	3	94	49
1080/2:Delamination/Spall/Patched Area	ft	49	0	0	0	0	0	0	100	49
Notes: _										
1090/2:Exposed Rebar	ft	3	0	0	0	0	100	3	0	0
Notes: _										
234/2:Re Conc Pier Cap	ft	25	72	18	28	7	0	0	0	0
1130/2:Cracking (RC and Other)	ft	7	0	0	100	7	0	0	0	0
Notes: _										
330/1:Metal Bridge Railing	ft	194	96	187	0	0	4	7	0	0
7000/1:Damage	ft	7	0	0	0	0	100	7	0	0
Notes: _										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	131	0	0	69	90	31	41	0	0
1080/1:Delamination/Spall/Patched Area	ft	90	0	0	100	90	0	0	0	0
Notes: _										
1190/1:Abrasion(PSC/RC)	ft	41	0	0	0	0	100	41	0	0
Notes: _										
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
7363/3:Steel Section Loss	each	2	0	0	0	0	100	2	0	0
8401/2:Wings	each	4	0	0	75	3	0	0	25	1

Remarks: Date 11/18/2002 - 12 ft. metal bridge rail missing due to collision damage. NBI Remarks: No bridge end markers. Sidewalk faulted 6" both ends. Vehicle damage to railing northeast corner. Deterioration of southwest wing concrete with up to 7" of section loss. Scour hole under structure, 10' x 30' x 1.0' deep.. Some tree growth removed near channel in 2011. Metal railing both sides repainted in 2013. Some areas of concrete curb repaired in 2013.

Alert Code 1: Scaling and deterioration of the east abutment concrete with up to 2" of section loss. Cracking of center pier cap - both ends.

Alert Code 2: Deterioration of concrete at the west abutment with up to 4" of section loss with exposed reinforcing steel to the lower portion. Deterioration and scaling with section loss to the lower portion of both piers exposing reinforcing steel.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-113-32.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	45.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	CRYSTAL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	IORTH BRANCH PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH OF CRYSTAL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	598415.5 5378225.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 14 25 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 8 15 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	204 Gravel/Dirt	209 Posted in "Tons"	15 Tons
Age and Service		Appraisal	
27 Yr Built	1948 106 Yr Reconstructed	2001	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	3 Intolerable - Correct
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	2 30 Year of ADT	2014	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	3 Intolerable - Correct
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	May 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	16.1 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	1 48 06/08/2015
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	16.4 Ft.	212 Structure Load Rated	02/13/2017
52 Deck Width	18.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-113-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	495	100	495	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	256	0	0	11	28	89	228	0	0
1000/2:Corrosion	ft	228	0	0	0	0	100	228	0	0
Notes: _										
1900/2:Distortion	ft	28	0	0	100	28	0	0	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
215/3:Re Conc Abutment	ft	36	39	14	39	14	22	8	0	0
1080/3:Delamination/Spall/Patched Area	ft	8	0	0	0	0	100	8	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	14	0	0	100	14	0	0	0	0
Notes: _										
332/1:Timb Bridge Railing	ft	59	71	42	17	10	0	0	12	7
1140/1:Decay/Section Loss	ft	7	0	0	0	0	0	0	100	7
Notes: _										
1170/1:Split/Delamination (Timber)	ft	10	0	0	100	10	0	0	0	0
Notes: _										
8401/3:Wings	each	4	75	3	25	1	0	0	0	0

Remarks: NBI Remarks: New deck in 2001. North wings are tied back with deadman. Poor horizontal and vertical roadway alignment. Vehicle damage to timber curb east side south end. Bump at both bridge ends. Channel bank erosion near SE wing. Diagonal crack upper NE corner north abutment. 5/2018 - Tree debris in channel near SW wing. Some minor inward movement at the south abutment.

Alert Code 1: East outside girder bowed outward. Northwest wing severely cracked and spalled with exposed reinforcing at wing corner & moved away from backwall approximately 1 ft. Scour hole under structure, 10' x 20' x 2' deep.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-114-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	87.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	LODEMA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 2 SOUTH OF HENSEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 39' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 38' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	599790.6 5390977.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 21 38 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 14 26 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1956 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	24 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 08, 2018
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	26 Ft.	218 Channel Profile	1 48 06/08/2015
49 Structure Length	28.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	08/03/2017
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-114-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	700	100	700	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	341	0	0	0	0	100	341	0	0
1000/2:Corrosion	ft	341	0	0	0	0	100	341	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes: _										
206/3:Timber Column	each	12	100	12	0	0	0	0	0	0
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	49	0	0	0	0	100	49	0	0
1000/2:Corrosion	ft	49	0	0	0	0	100	49	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes: _										
332/3:Timb Bridge Railing	ft	59	56	33	17	10	0	0	27	16
1140/3:Decay/Section Loss	ft	18	0	0	56	10	0	0	44	8
Notes: _										
7000/3:Damage	ft	8	0	0	0	0	0	0	100	8
Notes: _										
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
Notes: _										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Girders 1, 4, 7, 9 and 13 are bowed. Rusty girders. Rotting deck planks with some replaced. East outside girder bent. Pitting with minor section loss to bottom flange-girder #3. Top wing plank of northeast wing missing. Some new deck planks added in 2004. 11/2010 - Curb missing both sides north end. Channel runs along south abutment. 5/1/14 - In 2013 county forces repaired southwest wing with new planks & 1 new I-beam pile. Rock riprap added around both south wings. - See photos. One BEM missing southwest corner. 5/2016 - In 2015 the county installed new timber curb east side, did a channel cleanout, placed riprap under structure, along south wings, along channel bank west of structure and spillway 300' east of structure.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-116-25.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	52.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	LODEMA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 2 SOUTH OF HENSEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 39' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 36' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	603010.6 5390466.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 38 69 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 23 42 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed	2018	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT	2019	7 Above Minimum
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	December 02, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	18 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.5 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	25.30 Ft.	218 Channel Profile	1 48 06/08/2015
50 Curb/Sidewalk Widths	1.9 Ft Rt-Side	Chaining Date	None
	1.9 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	09/07/2018
	20.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, inspector1
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-116-25.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	619	100	619	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	329	0	0	0	0	100	329	0	0
Notes:Freckled rusting to all Girders. See Photo. - 12/2/2019										
1000/2:Corrosion	ft	329	0	0	0	0	100	329	0	0
Notes:Freckled rusting to various elements of all Girders. See Photo. - 12/2/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Areas of limited effectiveness. - 12/2/2019										
206/3:Timber Column	each	14	36	5	0	0	64	9	0	0
1160/3:Crack (Timber)	each	1	0	0	0	0	100	1	0	0
Notes:Pile 4 South Abutment cracked near the bottom. See Photo. - 12/2/2019										
1900/3:Distortion	each	8	0	0	0	0	100	8	0	0
Notes:Piles 1-4 South Abutment and Piles 4-7 leaning from Abutment movement. See Photo. Pile 5 split at top and open 1/2". See Photo. - 12/2/2019										
216/3:Timber Abutment	ft	69	0	0	0	0	100	69	0	0
1900/3:Distortion	ft	69	0	0	0	0	100	69	0	0
Notes:South Abutment inward movement at SW Corner and NE Corner causing lean. See Photo. - 12/2/2019										
231/2:Steel Pier Cap	ft	69	0	0	0	0	100	69	0	0
1000/2:Corrosion	ft	69	0	0	0	0	100	69	0	0
Notes:Rusting to both Abutment steel Plates. See Photo. - 12/2/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Areas with limited effectiveness. - 12/2/2019										
332/1:Timb Bridge Railing	ft	48	100	48	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railing. Corners have now been tied down with deadman. Minor ice impact damage to bottom flange girder #8. 10/2010 -No change in lean measurements. 5/10/2012 - Channel cleanout both sides in 2011. 5/28/2014 - Rock riprap placed @ front of both north wings - See photos. 6/2016 - 2015 the county placed riprap thru channel under structure both banks and channel east of bridge, north bank west of bridge and erosion control blanket south bank west of bridge. See photos 8/28/2018 - County straightened all girders that were tilted. Replaced deck and added new timber curb. Inspection incomplete in November due to Inspection of Incomplete October 2019 County Structures. Inspection completed 12/2/2019. - 12/2/2019

Alert Code 1: South channel bank eroding, sloughing just east of structure. Pile #4 south abutment cracking near bottom. See Photo. - 12/2/2019

Alert Code 2: Northeast corner of north abutment leans 4 1/2" in 4'. No change in lean measurements in 2012, 2014 or 2016, 2018 and 2019. - 12/2/2019

Alert Code 3: 8/28/2018 - SW corner of the south abutment leans in 8" in 4', 7.75" in 4' before. 12/2019 - SW Corner of South Abutment leans 8 1/4" in 4' Previous Inspection 8". Additional lean observed. - 12/2/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-117-31.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	52.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	ELORA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 1 EAST OF HOOPLE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 33' 27.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 36' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	603295.0 5379225.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 54 97 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 32 59 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1955 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT 2014	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	May 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.3 Ft.	Underwater	N
48 Length of Max Span	20 Ft.	Other Special	N
49 Structure Length	44.95 Ft.	218 Channel Profile	1 48 06/08/2015
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	02/13/2017
	23.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-117-31.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,098	98	1,073	1	12	1	13	0	0
1180/1:Abrasion	sq.ft	25	0	0	48	12	52	13	0	0
107/2:Steel Opn Girder/Beam	ft	689	0	0	90	620	10	69	0	0
1000/2:Corrosion	ft	689	0	0	90	620	10	69	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	70	70	30	30	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	70	70	30	30	0	0
Notes:_										
206/3:Timber Column	each	24	75	18	17	4	8	2	0	0
1170/3:Split/Delamination (Timber)	each	2	0	0	50	1	50	1	0	0
Notes:_										
1900/3:Distortion	each	4	0	0	75	3	25	1	0	0
216/3:Timber Abutment	ft	49	0	0	0	0	100	49	0	0
1900/3:Distortion	ft	49	0	0	0	0	100	49	0	0
Notes:_										
231/2:Steel Pier Cap	ft	85	0	0	0	0	100	85	0	0
1000/2:Corrosion	ft	85	0	0	0	0	100	85	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:_										
332/1:Timb Bridge Railing	ft	89	93	83	0	0	0	0	7	6
1140/1:Decay/Section Loss	ft	6	0	0	0	0	0	0	100	6
Notes:_										
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railings. Minor rotting lower portion of piling. Top abutment plank in west abutment tilting back. No BEM's. Pile #3 west abutment split @ top & open 1/2". Vehicle damage to west end deck plank. Some deck plank replaced. 6/2/2014 - In 2013 county forces installed fabric behind both abutments & added rock riprap @ all 4 wing corners. 6/2016 - Section of curb missing SW corner.

Alert Code 1: 11/2010 - North outside pile @ east abutment split & open 2". Roadway embankment settling @ abutment corners.5/2018 - No change in lean. Tree debris is lodged against center pier north side. Bump at east end.

Alert Code 2: South 1/2 of east abutment leans in 7 5/8" in 4' on the south pile, a change from 6" previous inspection. Continued inward movement noted in 2012. No change in east abutment lean in 2014 or 2016. West abutment leans in 2 1/2" in 4' measured @ the southwest corner no change in 2016.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-118-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	LODEMA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST 1 NORTH ST. THOMAS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 38' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 33' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	606265.1 5389284.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 32 58 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 19 35 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1959 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	24 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 08, 2018
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.0 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 06/08/2015
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	02/13/2017
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-118-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	592	98	578	2	10	0	0	1	4
1140/1:Decay/Section Loss	sq.ft	4	0	0	0	0	0	0	100	4
Notes: _										
1170/1:Split/Delamination (Timber)	sq.ft	10	0	0	100	10	0	0	0	0
Notes: _										
107/2:Steel Opn Girder/Beam	ft	239	0	0	100	239	0	0	0	0
1000/2:Corrosion	ft	239	0	0	100	239	0	0	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes: _										
206/3:Timber Column	each	12	83	10	17	2	0	0	0	0
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes: _										
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	49	0	0	0	0	100	49	0	0
1000/2:Corrosion	ft	49	0	0	0	0	100	49	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
332/1:Timb Bridge Railing	ft	49	71	35	0	0	0	0	29	14
1140/1:Decay/Section Loss	ft	14	0	0	0	0	0	0	100	14
Notes: _										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railings. Minor damage to top wing plank - northwest wing. Some new deck planks replaced in 2004. Drop structure approximately 400' upstream. 10/2010 -Riprap placed @ SE & SW wing corners. Pile #4 from the west @ the south abutment split @ the top & open to 1/2". 5/1/14 - Riprap placed @ northeast wing. Vehicle damage to south end of running deck planks. Some minor embankment erosion behind southeast wing. 6/2016 - Channel clean out in 2015. riprap installed at all wing corners. No riprap under bridge or channel.

Alert Code 1: 5/2018 - pile #1 north abutment split open 1/2". Hole in deck north end 1' x 3'.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-119-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	LODEMA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 1 NORTH ST. THOMAS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 38' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 32' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	607870.1 5389487.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	N N/A (NBI)
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 43 77 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 25 47 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	201 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1972 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	26 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 08, 2018
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 06/08/2015
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	02/14/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-119-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	743	100	739	0	0	1	4	0	0
1140/1:Decay/Section Loss	sq.ft	4	0	0	0	0	100	4	0	0
Notes: _										
107/2:Steel Opn Girder/Beam	ft	364	0	0	100	364	0	0	0	0
1000/2:Corrosion	ft	364	0	0	100	364	0	0	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes: _										
206/3:Timber Column	each	12	92	11	8	1	0	0	0	0
1170/3:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	49	0	0	0	0	100	49	0	0
1000/2:Corrosion	ft	49	0	0	0	0	100	49	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
Notes: _										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railings. Two BEM's missing. Poor channel alignment from west. Wheel path planks added.
6/2015 - Channel cleanout in 2015. Riprap placed at wing corners and thru channel under bridge.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-120-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	79.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	ST. THOMAS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 2 NORTH ST THOMAS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 39' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 30' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	609526.8 5389823.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	N N/A (NBI)
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 19 34 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 11 21 Tons
208 Dk Overburden	206 Gravel/Dirt	70 Bridge Posting	4 0.1-9.9%below
Age and Service		209 Posted in "Tons"	21 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2014	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	May 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	1 48 06/08/2015
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	02/14/2017
	27.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-120-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	721	97	701	3	20	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	20	0	0	100	20	0	0	0	0
Notes: _										
107/2:Steel Opn Girder/Beam	ft	322	0	0	50	161	50	161	0	0
1000/2:Corrosion	ft	322	0	0	50	161	50	161	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	50	50	50	50
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	50	50	50	50
Notes: _										
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	56	0	0	0	0	100	56	0	0
1000/2:Corrosion	ft	56	0	0	0	0	100	56	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes: _										
332/1:Timb Bridge Railing	ft	52	94	49	0	0	0	0	6	3
1140/1:Decay/Section Loss	ft	3	0	0	0	0	0	0	100	3
Notes: _										
8401/2:Wings	each	4	75	3	25	1	0	0	0	0

Remarks: NBI Remarks: No railings. Minor rotting deck planks. Vehicle damage to southeast corner of curb. Ice damage to top of northeast wing pile. 5/10/2012 - Drop structure 500' downstream. 6/2016 - Channel clean out in 2015. Riprap placed at all wings, thru channel under bridge and channel west side. See photo.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-121-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	ST. THOMAS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 2 NORTH ST THOMAS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 39' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 29' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	611139.5 5389672.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 36 66 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 22 40 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed	2016	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT	2014	7 Above Minimum
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	May 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.0 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	24.50 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/30/2016
	22.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-121-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	592	92	542	0	0	4	25	4	25
1170/1:Split/Delamination (Timber)	sq.ft	50	0	0	0	0	50	25	50	25
107/2:Steel Opn Girder/Beam	ft	243	0	0	60	146	40	97	0	0
1000/2:Corrosion	ft	243	0	0	60	146	40	97	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
206/3:Timber Column	each	12	33	4	67	8	0	0	0	0
1170/3:Split/Delamination (Timber)	each	8	0	0	100	8	0	0	0	0
Notes: _										
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	49	0	0	0	0	100	49	0	0
1000/2:Corrosion	ft	49	0	0	0	0	100	49	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
332/1:Timb Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railings. Riprap added along south abutment. Some new deck plank added in 2006. Poor channel alignment southeast of structure. 6/2016 - No BEM'S. Both abutment caps sagging near the center. Channel cleanout, riprap placed thru channel under the bridge and thru the channel west side in 2015. See photos. 6/30/2016 - New timber deck and curb in 2016. 11/2016 - Contractor sand blasted ,glued and installed 12" culvert connecting bands on split piles 2-5 south abutment. Also installed bands on piles 1 & 6. 5/2018 - Vehicle damage to some deck planks.

Structure Number: 34-122-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Applicable	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	HAMILTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 1 NORTH CAVALIER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 47' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 29' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	610889.9 5405218.5	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden		70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	December 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	42.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	29.17 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	BRO-0034(033)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, inspector1
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	0 Ft.
DBL 14'x5' Precast RCB			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-122-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	88	100	88	0	0	0	0	0	0
8398/1:Slope Protection	each	4	100	4	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: New Structure in 2019. Inspection completed 12/16/2019. - 12/16/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-122-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	ST. THOMAS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 1 WEST ST THOMAS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 38' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 28' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	612238.0 5389080.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2000 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2014	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	April 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	15.7 Ft.	Underwater	N
48 Length of Max Span	9 Ft.	Other Special	N
49 Structure Length	21.98 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sourm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 112" X 75" X 70' SPPA		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-122-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	141	0	0	100	141	0	0	0	0
1900/3:Distortion	ft	141	0	0	100	141	0	0	0	0
Notes: _										
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: Sag in pipes approximately 5 inches. NBI Remarks: Minor damage to north end of the west pipe. 4-30-14 - County forces added additional rock riprap between culverts & sides of both culverts north end. 5/2016 - One to two feet of silt buildup in both culverts. Channel cleanout north of culvert in 2016. Rock riprap dam 100' from north end of culvert installed 2015. 4/19/2018 - Channel cleanout south of structure in 2017.

Alert Code 1: 10/2010 - Approximately 6" sag east pipe, 9" sag west pipe.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-123-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	ST. THOMAS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF ST. THOMAS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 37' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 27' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	613076.8 5387487.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1998 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2014	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	15 Ft.	90 Date of Last Inspection	May 03, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	14.8 Ft.	Underwater	N
48 Length of Max Span	9 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 112INX75INX50' CSP ARCH		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-123-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	98	0	0	100	98	0	0	0	0
1900/3:Distortion	ft	98	0	0	100	98	0	0	0	0
Notes: _										
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: NBI Remarks: Poor channel alignment. Pipe ripped both ends. 5/2018 - Channel cleanout both ends in 2017.

Alert Code 1: Sag in center of both pipes 6" to 9".

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-124-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	ST. THOMAS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 1 SOUTH ST THOMAS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 36' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 25' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	616095.5 5384320.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 29 53 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 17 32 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed	2015	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT	2014	7 Above Minimum
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	April 24, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	49.70 Ft.	218 Channel Profile	1 48 06/09/2015
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	22.8 Ft.	212 Structure Load Rated	01/04/2016
52 Deck Width	24.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-124-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,205	100	1,205	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	601	0	0	0	0	100	601	0	0
1000/2:Corrosion	ft	601	0	0	0	0	100	601	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:_										
202/3:Steel Column	each	1	0	0	0	0	100	1	0	0
1000/3:Corrosion	each	1	0	0	0	0	100	1	0	0
Notes:_										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:_										
206/3:Timber Column	each	17	100	17	0	0	0	0	0	0
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	6	0	0	0	0	100	6	0	0
1000/2:Corrosion	ft	6	0	0	0	0	100	6	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:_										
235/2:Timber Pier Cap	ft	78	100	78	0	0	0	0	0	0
Notes:_										
332/1:Timb Bridge Railing	ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
Notes:_										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railings. New timber deck and curb in 2015. South abutment piles bowed back. County has replaced the west outside pile with a 12" round metal pile and welded a 12" h-pile to the top of the pile and the bottom of the metal cap at center pier in 2004. Minor cracking lower portion pile #2 south abutment. 10/2010 - Riprap placed @ culvert where it enters the channel near the SW wing. 11/2015 - In 2015 county forces repaired the south abutment and placed riprap at the south abut. New timber caps both abutments and center pier,new timber deck,curbs and running deck planks. 4/24/2018 - Embankment erosion behind SW wing.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-125-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	87.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	ST. THOMAS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST OF ST THOMAS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 36' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 24' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	616880.2 5385921.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 30 54 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 18 33 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1956 106 Yr Reconstructed	2015	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	4 Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	120 30 Year of ADT	2014	7 Above Minimum
109 Average Daily Truck Traffic	11.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	April 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	24.50 Ft.	218 Channel Profile	1 48 06/09/2015
50 Curb/Sidewalk Widths	0.6 Ft Rt-Side	Chaining Date	None
	0.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	23.6 Ft.	212 Structure Load Rated	02/14/2017
52 Deck Width	24.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sourm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-125-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	592	100	592	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	305	0	0	34	105	66	200	0	0
1000/2:Corrosion	ft	305	0	0	34	105	66	200	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	33	33	67	67
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	33	33	67	67
Notes: _										
206/3:Timber Column	each	12	83	10	17	2	0	0	0	0
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes: _										
216/3:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
231/2:Steel Pier Cap	ft	49	0	0	0	0	100	49	0	0
1000/2:Corrosion	ft	49	0	0	0	0	100	49	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: NBI Remarks: No railings. Nr bridge end markers north side. Poor channel alignment to north. Riprap added to both east wings in 2004. 5/17/2012 - NW wing timber pile replaced with I-beam. 5/2016 - In 2015 county replaced timber deck and curb. Running deck planks added in wheel path. 4/2018 - Some bowing inward at both abutments north side.

Alert Code 1: Scour hole along east abutment 10' x 30' x 1.5' deep. Both north side outside piles split near the cap & open to 1" to about 3' down.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-125-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	57.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	ST. THOMAS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 SOUTH ST THOMAS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 36' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 24' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	617611.6 5384348.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	40 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	24 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1946 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	10 30 Year of ADT 2014	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic		36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 24, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 06/09/2015
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	02/14/2017
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-125-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	786	81	636	19	150	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	250	40	100	60	150	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	367	0	0	79	290	21	77	0	0
1000/2:Corrosion	ft	367	0	0	79	290	21	77	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	85	85	15	15	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	85	85	15	15	0	0
Notes: _										
215/3:Re Conc Abutment	ft	52	23	12	0	0	77	40	0	0
1080/3:Delamination/Spall/Patched Area	ft	40	0	0	0	0	100	40	0	0
Notes: _										
331/1:Re Conc Bridge Railing	ft	59	100	59	0	0	0	0	0	0
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railings. No bridge end markers. Spalled concrete end of northeast wing exposing reinforcing steel. Poor channel alignment northside. Riprap added behind both east wings and northwest wing. Riprap also placed along east abutment face. Channel bank erosion to both banks downstream. Diagonal cracks @ both east end wing corners. Slope protection settled, displaced @ east abutment.

Alert Code 1: 10/2010 - Scour hole under structure 30' x 15' x 2.0' deep.

Alert Code 2: Up to 3" of section loss to both abutments at the waterline to the top of footing. 10/2010 - East abutment leans away 5" in 4'. No change in 2010, 2012, 2014 or 2016. 4/2018 - Lean measures 5" in 4' @ the east abutment measured at the SE corner.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-126-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	70.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	MIDLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 3 SOUTH ST THOMAS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 34' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 23' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	618984.9 5381342.3	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 37 67 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 40 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	24 30 Year of ADT 2014	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 03, 2018
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.3 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 06/09/2015
49 Structure Length	49.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	08/31/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-126-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
16/1:Re Conc Top Flange	sq.ft	1,212	100	1,212	0	0	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	400	100	400	0	0	0	0	0	0
206/1:Timber Column	each	18	72	13	0	0	28	5	0	0
1160/1:Crack (Timber)	each	5	0	0	0	0	100	5	0	0
Notes: _										
216/1:Timber Abutment	ft	60	25	15	25	15	50	30	0	0
1900/1:Distortion	ft	45	0	0	33	15	67	30	0	0
Notes: _										
234/2:Re Conc Pier Cap	ft	79	43	34	37	29	20	16	0	0
1080/2:Delamination/Spall/Patched Area	ft	45	0	0	64	29	36	16	0	0
Notes: _										
331/1:Re Conc Bridge Railing	ft	98	96	94	4	4	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	4	100	4	0	0	0	0	0	0
Notes: _										
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
8398/1:Slope Protection	each	1	0	0	100	1	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: No railings. Spalling of cap center pier. Diagonal bracing center pier removed. Top plank on north abutment & 3rd plant down on south abutment seperated approximately 1 1/2". Top wing planks seperating from piling @ both abutment. Southeast wing rebuilt in 2004. South channel bank erosion near structure & behing SE wing. Riprap placed along south abutment with some settlement & displaced riprap. 5/2016 - BEM'S missing north end.

Alert Code 1: Span 1 - Beam 2 & 3 separated 1 1/2", Beam 5 & 6 separated 1". Span 2 - Beam 1 & 2 separated 1 1/2", Beam 5 & 6 separated 1". Every other beam bolted together only over caps. Both abutment caps tilting away causing spall areas to the tops of both caps under the channel beam seats. South abutment moving in @ the bottom causing some cracking to the lower portion of beams 4 thru 6 @ the south abutment. Bump at south end.

Alert Code 2: 5/2016 - South abutment moving in @ the bottom causing some cracking to the lower portion of piles 2 thru 6 @ the south abutment.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-128-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	MIDLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 4 SOUTH ST THOMAS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 33' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	622225.5 5380324.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 45 82 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 27 49 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1956 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	15 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 03, 2018
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.4 Ft.	Other Special	N
48 Length of Max Span	29 Ft.	218 Channel Profile	1 48 06/09/2015
49 Structure Length	61.02 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.8 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.8 Ft Lt-Side	212 Structure Load Rated	02/14/2017
51 Bridge Rdwy Width - Curb to Curb	19.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-128-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,345	100	1,345	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	499	0	0	100	499	0	0	0	0
1000/2:Corrosion	ft	499	0	0	100	499	0	0	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:_										
206/3:Timber Column	each	20	80	16	15	3	0	0	5	1
1170/3:Split/Delamination (Timber)	each	4	0	0	75	3	0	0	25	1
Notes:_										
216/3:Timber Abutment	ft	43	100	43	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	89	0	0	0	0	100	89	0	0
1000/2:Corrosion	ft	89	0	0	0	0	100	89	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:_										
332/1:Timb Bridge Railing	ft	121	100	121	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	2	50	1	50	1	0	0	0	0

Remarks: 12/08/2004: Slight sag in steel cap 1st pier from north. 11/14/2006 - Pile #4 South abutment broke in half, (Failed) Pile #1-Pier #3 split pile. 12/18/2008 - Pier #2 from north, sagged between piles.(photo) NBI Remarks: No railings. Slight sag to the east end of channel beam pier cap in pier #3. Ice damage to cross braces south pier. Pier #2 pier cap sagging between piles-see photos. Second pile from the west cracked and open approx. 1/2" at pier #3. Concrete filled tube installed around pile #4 south abutment embankment & riprap installed at south abutment slope protection. Riprap placed along the north channel bank downstream. 5/2016 - Pile #2 pier #2 split open at top .5". 5/2018 - County replace several deck planks and added 3" x 12" deck planks in the wheel path and replaced timber curb in 2017.

Alert Code 2: Pile #4 cracked near the bottom south abutment. West outside pier pile cracked and open to 1" at pier #3. 5/2016 - Metal collar installed on pile #1 pier #2 to prevent further cracking.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-129-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	79.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Local
04 City	MIDLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 4 SOUTH OF ST THOM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 33' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	623844.9 5379582.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	6 Corrugated Steel	64 Oper. Rating	HS 20 37 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 11 21 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	201 Gravel/Dirt	209 Posted in "Tons"	25 Tons
Age and Service		Appraisal	
27 Yr Built	1980 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	10 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 03, 2018
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	26.2 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 06/09/2015
49 Structure Length	65.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	26.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-129-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
30/1:Steel Deck - Orthotropic	sq.ft	1,851	96	1,777	0	0	3	60	1	14
7000/1:Damage	sq.ft	74	0	0	0	0	81	60	19	14
Notes: _										
107/2:Steel Opn Girder/Beam	ft	771	0	0	100	771	0	0	0	0
1000/2:Corrosion	ft	771	0	0	100	771	0	0	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
202/3:Steel Column	each	1	0	0	100	1	0	0	0	0
1000/3:Corrosion	each	1	0	0	100	1	0	0	0	0
Notes: _										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes: _										
206/3:Timber Column	each	28	96	27	4	1	0	0	0	0
1170/3:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes: _										
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	123	0	0	0	0	100	123	0	0
1000/2:Corrosion	ft	123	0	0	0	0	100	123	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
332/1:Timb Bridge Railing	ft	131	77	101	23	30	0	0	0	0
1150/1:Check/Shake	ft	30	0	0	100	30	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	25	1	75	3	0	0	0	0

Remarks: 11/29/2006 - Because of flood damage, the County replaced timber piling #1 in Pier #2 with 12" H-pile. Steel channel beam doubled for 6' this area. See Photos. NBI Remarks: No railings. Drop structure 300' east of structure. Old piling in channel. Top of northeast wing pile rotting. Top plank of northwest wing missing. County repaired broken pile in pier #2. Replaced with 12" h-pile. Steel cap doubled this area-see photos. Riprap added to south abutment. 2010- Country replaced 2 backwall planks south abutment & placed riprap around culvert where it enters the channel near the SW wing. 6/9/14 - Structure posted 25 ton south end only. Pile #7 south abutment split @ the top & open 1".

Alert Code 1: 5/2016 - Vehicle damage to 3 areas of holes in deck. See photo. Bump at south end of deck with some damage to the steel deck.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-130-32.0

200 System Designation	2 – County On	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	66.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Major Collector
04 City	MIDLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03429 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST OF DRAYTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.900	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 33' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 17' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625451.8 5379613.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 36 65 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 31 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	304 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1964 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	110 30 Year of ADT 2014	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	15.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	10 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 03, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.9 Ft.	Other Special	N
48 Length of Max Span	56 Ft.	218 Channel Profile	1 48 06/09/2015
49 Structure Length	58.07 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	28.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 34-130-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	554	100	552	0	0	0	2	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
215/3:Re Conc Abutment	ft	59	24	14	25	15	51	30	0	0
1130/3:Cracking (RC and Other)	ft	15	0	0	100	15	0	0	0	0
Notes: _										
331/1:Re Conc Bridge Railing	ft	115	98	113	0	0	2	2	0	0
1090/1:Exposed Rebar	ft	2	0	0	0	0	100	2	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/21/2002 - See SI & A sheets, severe lean south abutment. 11/29/2006 - Lean unchanged this inspection south abutment. 12/23/2008 - South abutment lean unchanged. NBI Remarks: Spalling under beams south abutment. Vehicle damage to northeast corner curb. South bank erosion both sides of structure. No railings. Exposed footing south abutment. Utility cable attached to outside west curb. Vertical and diagonal cracking in the south abutment

Alert Code 1: 5/2016 - Scour along south abutment 20' x 40' x 1' deep.

Alert Code 2: 10/2010 - No change in lean measurements. South abutment bottom moving inward toward channel-leaning 4.25" in 4' west, 4" in 4' east, also top moved in 7" west side, 6" previous inspection - continued inward movement noted @ the west side of the south abutment in 2012. Minimal movement @ the SE corner south abutment. 5/8/2014 - No change in lean measurement & no change in inward movement of the south abutment observed in 2014 or 2016. 5/2018 - No change in lean or inward movement in 2018.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 34-136-28.0

200 System Designation	2 – County On	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	52.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Pembina	26 Functional	Rural, Major Collector
04 City	DRAYTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03428 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH OF DRAYTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	13.797	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 36' 27.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	634255.5 5385434.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 50 90 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 30 54 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	36 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	225 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	7 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 05, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	33.1 Ft.	Other Special	N
48 Length of Max Span	17 Ft.	218 Channel Profile	1 48 06/09/2015
49 Structure Length	37.07 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/31/2017
51 Bridge Rdwy Width - Curb to Curb	33.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	35.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, inspector1
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 34-136-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	361	96	348	0	0	4	13	0	0
1080/2:Delamination/Spall/Patched Area	ft	10	0	0	0	0	100	10	0	0
Notes:Various spalling to underside of Channel Beams. See Photo. - 12/5/2019										
1090/2:Exposed Rebar	ft	3	0	0	0	0	100	3	0	0
Notes:Spalling with exposed rebar to underside of Second to last channel beam near NE Corner. See Photo. - 12/5/2019										
206/3:Timber Column	each	30	33	10	57	17	10	3	0	0
1900/3:Distortion	each	20	0	0	85	17	15	3	0	0
Notes:Distortion to all piles at both Abutments due to lean movement of abutment. See Photo. - 12/5/2019										
216/3:Timber Abutment	ft	69	0	0	0	0	100	69	0	0
1900/3:Distortion	ft	69	0	0	0	0	100	69	0	0
Notes:Inward movement at the top with outward movement at the bottom causing lean to both Abutments. See Photo. - 12/5/2019										
234/2:Re Conc Pier Cap	ft	36	67	24	0	0	33	12	0	0
1080/2:Delamination/Spall/Patched Area	ft	8	0	0	0	0	100	8	0	0
Notes:Spalling to North end of Pier Cap. See Photo. See - 12/5/2019										
1090/2:Exposed Rebar	ft	4	0	0	0	0	100	4	0	0
Notes:Spalling with exposed rebar underside of cap at East end. See Photo. - 12/5/2019										
235/2:Timber Pier Cap	ft	69	78	54	0	0	22	15	0	0
1900/2:Distortion	ft	15	0	0	0	0	100	15	0	0
Notes:Inward movement of North Abutment cap with a slight bow. - 12/5/2019										
331/1:Re Conc Bridge Railing	ft	75	93	70	5	4	1	1	0	0
1080/1:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes:Minor spalling to West Curb. Spalling to SW Corner. See Photo. - 12/5/2019										
1090/1:Exposed Rebar	ft	1	0	0	0	0	100	1	0	0
Notes:Spalling with Exposed Rebar to SW Corner. See Photo. - 12/5/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Date 12/16/2004: County has braced using 6" x 12" timbers between south abutment and center pier. Using 3 timbers to arrest movement, see photo. Tops of both abutments leaning in 2" to 6" on 4 ft. level. 11/29/2006 - Lean measurements unchanged. 12/29/2008 - Lean abutments unchanged. NBI Remarks: No railings. Spalling of center pier cap under beams over piling. Minor spalling on southwest corner of curb exposing reinforcing steel. Reinforcing steel exposed in some precast channel beams. 3 - 6" x 12" treated timber braces installed from south abutment to center pier to stop abutment from moving in. Vertical hairline cracks over piling pier cap. Lower portion of pier cap spalled with exposed reinforcing steel on east end. Top wing planks broken @ the NW & SE wings. Channel cleanout in east of structure in 2013. Channel runs thru south span - See photo. Inspection incomplete in November due to the completion of incomplete inspections from 2019 October County Structures. Inspection completed 12/5/2019. Telescoping Ladder used for the inward measurements. - 12/5/2019

Alert Code 1: Beaver Dam West of Structure restricting flow. See Photo. - 12/5/2019

Structure Number: 34-136-28.0

Alert Code 3: South abutment has moved in 20" west side, 16.5" east side, east end leans in 3" in 4' west end 5.5" in 4'. North abutment leans in 7" in 4' west and 4" in 4' east, no change in lean measurements in 2014. North abutment has moved in @ the top 26" west side, 11" east side measured from back of timber cap to back of channel beams. 6/2016 - More inward movement in 2016 & 2018 North abutment west side leans 6.5" in 4', 6.25 before. East side leans 3.75" in 4', 3.25" before. South abutment no change east side but west side leans in 5.5" in 4', 5" before in 2014. 12/2019 - No Change in Inward movement at the top of SE Corner of South Abutment. Previous Inspection 20". Measured in-between East Channel Beams from back of channel beam to back of timber cap. No Change in the 3" Lean near SE Corner. Inward movement of 20 1/2" at SW Corner of South Abutment. Previous measured movement of 20". Measured in-between West Channel Beams from back of channel beam to back of timber cap. No Change in the 5 1/2' Lean near SW Corner. No Change in the 16.5" inward movement at the top of the NE Corner of North Abutment. Measured in-between East Channel Beams from back of Channel Beam to back of Timber Cap. No Change in the 4" Lean near NE Corner. No Change in the 26" Inward Movement at NW Corner of North Abutment. Measurement taken in-between West Channel Beams at NW Corner. No Change in the 7" Lean near NW Corner. - 12/5/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 35-109-05.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	53.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Pierce	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 2 SOUTH BARTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 28' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 04' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	420129.1 5369884.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 26 48 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 16 29 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	204 Gravel/Dirt	209 Posted in "Tons"	05 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	5 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 24, 2018
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.1 Ft.	Other Special	N
48 Length of Max Span	20 Ft.	218 Channel Profile	1 48 07/05/2017
49 Structure Length	21.98 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	02/15/2017
51 Bridge Rdwy Width - Curb to Curb	17.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 35-109-05.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	377	95	358	5	19	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	19	0	0	100	19	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	177	0	0	100	177	0	0	0	0
1000/1:Corrosion	ft	177	0	0	100	177	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
215/1:Re Conc Abutment	ft	36	0	0	0	0	100	36	0	0
4000/1:Settlement	ft	36	0	0	0	0	100	36	0	0
331/1:Re Conc Bridge Railing	ft	43	0	0	100	43	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	43	0	0	100	43	0	0	0	0
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
8401/1:Wings	each	4	0	0	25	1	75	3	0	0
1080/1:Delamination/Spall/Patched Area	each	3	0	0	0	0	100	3	0	0
4000/1:Settlement	each	1	0	0	100	1	0	0	0	0

Remarks: NBI Remarks: Large spalls at inner corners of both south wingwalls. Back of NE wing severely deteriorated. Exposed rebar has 70% loss of section. Concrete surfaces have random hairline cracks with minor deterioration. Girders are surface rusted. 0.50 mm horizontal crack under girders in north abutment. Moderate deterioration of concrete below high water line. No bridge rails. No end markers. North abut leaning toward channel 4" in 4'.

Alert Code 1: Large crack full width of south abutment just under girders diaphragms and girders have pushed south 4" at west end and 11.5" at east end. footing, for north abutment, exposed by scour with minor undermining. South footing partially exposed.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 35-135-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Pierce	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 SOUTH 9 EAST OF WOLFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 22' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 30' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	461862.1 5358900.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 36 65 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 39 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1970 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 24, 2018
32 Approach Roadway Width	19 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 07/05/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	09/05/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 35-135-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	200	95	190	0	0	5	10	0	0
1080/2:Delamination/Spall/Patched Area	ft	10	0	0	0	0	100	10	0	0
206/1:Timber Column	each	12	0	0	100	12	0	0	0	0
1150/1:Check/Shake	each	12	0	0	100	12	0	0	0	0
216/3:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
4000/3:Settlement	ft	52	0	0	100	52	0	0	0	0
235/2:Timber Pier Cap	ft	52	0	0	100	52	0	0	0	0
1150/2:Check/Shake	ft	52	0	0	100	52	0	0	0	0
331/1:Re Conc Bridge Railing	ft	49	90	44	10	5	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1140/3:Decay/Section Loss	each	1	0	0	100	1	0	0	0	0
1900/3:Distortion	each	3	0	0	100	3	0	0	0	0

Remarks: . NBI Remarks: No bridge rails. Bridge has precast concrete curbs. Honeycomb on bottom of east outside channel beam (minor). Bottom of one other beam has moderate spall. Top most plank in both abutments is tipped back. Settlement of both embankments has exposed outer corners of deck. Channel under structure approx. 4 to 5' lower than incoming channel. End markers missing. North abutment leaning toward channel approx.0.5'. South abutment starting to lean inward 1-2". Concrete curb spalled with rebar exposed in NE corner.

Alert Code 1: Top half of NW wing is fire charred. Soffit plank over piling and first vertical plank have severe fire damage.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 36-134-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Ramsey	26 Functional	Rural, Local
04 City	PROSPECT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH EDMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 28' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 27' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	540443.4 5368815.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2009 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	November 13, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.3 Ft.	Underwater	N
48 Length of Max Span	9 Ft.	Other Special	N
49 Structure Length	34.12 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Trottier, Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 108"X 42' CSP		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 36-134-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/2:Steel Culvert	ft	126	100	126	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: Triple 108" x 42' csp installed in 2009

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 36-134-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	72.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Ramsey	26 Functional	Rural, Local
04 City	FANCHER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH EDMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 26' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 26' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	540769.1 5364929.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 15 28 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 9 17 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	201 Gravel/Dirt	209 Posted in "Tons"	28 Tons
Age and Service		Appraisal	
27 Yr Built	1974 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	50 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 21, 2018
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	26.9 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	1 48 05/20/2019
49 Structure Length	36.09 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	26.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Trottier, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 36-134-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,012	100	1,012	0	0	0	0	0	0
111/1:Timber Open Girder	ft	525	100	525	0	0	0	0	0	0
206/3:Timber Column	each	14	93	13	0	0	7	1	0	0
7000/3:Damage	each	14	93	13	0	0	7	1	0	0
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No riprap. Embankment erosion around all wings. 10/10/2014 - 11/8/2016 -No bridge end markers.

Alert Code 1: South pile of sw wing is splintered.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 36-136-07.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Ramsey	26 Functional	Rural, Local
04 City	NEWLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 2 NORTH EDMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 26' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 24' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	543720.8 5365630.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2013 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	November 20, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/14/2013
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Trottier, Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 36-136-07.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/1:Steel Culvert	ft	142	100	142	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 36-136-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	48.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Ramsey	26 Functional	Rural, Local
04 City	NEWLAND TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 2 SOUTH EDMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 23' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 24' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	544024.6 5359312.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 29 53 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 17 32 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1937 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	10 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 21, 2018
32 Approach Roadway Width	15 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.0 Ft.	Other Special	N
48 Length of Max Span	21 Ft.	218 Channel Profile	1 48 05/20/2019
49 Structure Length	22.97 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	02/15/2017
51 Bridge Rdwy Width - Curb to Curb	19.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Trottier, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 36-136-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	463	63	292	37	171	0	0	0	0
1190/2:Abrasion(PSC/RC)	sq.ft	463	63	292	37	171	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	253	0	0	0	0	100	253	0	0
1000/3:Corrosion	ft	253	0	0	0	0	100	253	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	39	0	0	100	39	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	39	0	0	100	39	0	0	0	0
331/2:Re Conc Bridge Railing	ft	46	0	0	100	46	0	0	0	0
1130/3:Cracking (RC and Other)	ft	46	0	0	100	46	0	0	0	0
8401/3:Wings	each	4	0	0	0	0	100	4	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	0	0	100	4	0	0

Remarks: NBI Remarks: Bridge deck was widened in past. two inches of gravel on deck. no railing or end markers. South abutment leaning three inches in four feet south abutment leaning 4 1/4" in 4 feet. 10-2006 south abut. Leaning 5" in 4'.

Alert Code 1: Cracks on all wing walls.

Alert Code 2: Large vertical crack at juncture of SE wing and south abutment. South abut moving inward 6",girder #2 thru 4 are not seated on the abut. No change on south abutment movement 08/11/2009.SE CORNER OF ABUTMENT IS SETTLED 6" & NO CHANGE IN TILT. 8/23/2012 - No change in tilt on SE corner of abutment but moved in 10".10/14/2014 - No change in south abutment movement or tilt. 11/7/2016 - The South abutment has moved in 12" on East corner and 10" on West corner.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 36-137-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Ramsey	26 Functional	Rural, Local
04 City	HIGHLAND CENTER TOWN	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 3 NORTH EDMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 27' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 23' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	545290.3 5367252.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 31 56 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 18 34 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1935 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	20 30 Year of ADT 2018	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 20, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	26.6 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/20/2019
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	26.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Trottier, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 36-137-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	700	100	700	0	0	0	0	0	0
206/3:Timber Column	each	12	100	12	0	0	0	0	0	0
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
333/1:Other Bridge Railing	ft	49	0	0	100	49	0	0	0	0
1000/1:Corrosion	ft	49	0	0	100	49	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Tilt on west abument. East abutment tilts two inches in four feet away from channel.Bridge end markers and advance warning signs are up. No change in tilt on abutments january 2009. No bridge end markers. No change in tilt 8/23/2012. 10/10/2014 - No change in tilt and No bridge end markers. 11/8/2016 - Washout behind the NE corner of the abutment and No change in tilt. 11/20/18 No change in tilt.

Alert Code 1: Scour hole in channel under bridge deck

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 36-139-04.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Ramsey	26 Functional	Rural, Major Collector
04 City	HIGHLAND CENTER TOWN	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03606 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 5 NORTH EDMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	24.295	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 29' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 21' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	547703.7 5370492.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1935 106 Yr Reconstructed	1974	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	6 Equal Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	N Not applicable (NBI)
29 ADT	115 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	12.00	71 Waterway Adequacy	4 Tolerable
19 Bypass, Detour Length	10 Miles	72 App. Rdwy. Alignment	8 Equal Desirable Crit
Geometric Data		36 Traffic Safety Features	N N 1 1
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	8 Stable Above Footing
32 Approach Roadway Width	25 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	November 08, 2016
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	24.9 Ft.	Fracture Critical	N
48 Length of Max Span	10 Ft.	Underwater	N
49 Structure Length	21.00 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	218 Channel Profile	N
	0.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	207 Transporter Erector Routes and Sites	-1
52 Deck Width	0.0 Ft.	212 Structure Load Rated	01/01/1901
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Horn, Solwey
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
DOUBLE, 10X5X32 RCB EXTENDED 4' RT AND 4' LT		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 36-139-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	79	98	77	3	2	0	0	0	0
1130/3:Cracking (RC and Other)	ft	79	98	77	3	2	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 36-139-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	47.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Ramsey	26 Functional	Rural, Local
04 City	HIGHLAND CENTER TOWN	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 5 NORTH EDMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 28' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 20' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	548780.4 5369538.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 17 32 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 10 19 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	208 Gravel/Dirt	209 Posted in "Tons"	12 Tons
Age and Service		Appraisal	
27 Yr Built	1935 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	20 30 Year of ADT 2018	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 20, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/20/2019
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	02/15/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Trottier, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 36-139-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	484	83	402	17	82	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	484	83	402	17	82	0	0	0	0
31/1:Timber Deck	sq.ft	97	100	97	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	253	0	0	0	0	100	253	0	0
1000/2:Corrosion	ft	253	0	0	0	0	100	253	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	49	0	0	0	0	100	49	0	0
1090/3:Exposed Rebar	ft	49	0	0	0	0	100	49	0	0
8401/3:Wings	each	4	0	0	0	0	100	4	0	0
1140/3:Decay/Section Loss	each	4	0	0	0	0	100	4	0	0

Remarks: NBI Remarks: No end markers. no abutment tilt. Narrow bridge sign down south end. 8/23/2012 - No End markers and no Narrow Bridge signs. 10/10/2014 - No bridge end markers.

Alert Code 1: Concrete spalling with exposed rebar on abutments, wings and underside of deck.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 36-140-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	71.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Ramsey	26 Functional	Rural, Local
04 City	HIGHLAND CENTER TOWN	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 8 NORTH EDMORE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 31' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 19' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	549317.6 5375345.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	42 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	26 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1935 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	5 30 Year of ADT 2018	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 20, 2018
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	18.7 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/20/2019
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	02/15/2017
51 Bridge Rdwy Width - Curb to Curb	19.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Trottier, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 36-140-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	484	74	360	26	124	0	0	0	0
1190/2:Abrasion(PSC/RC)	sq.ft	484	74	360	26	124	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	207	0	0	0	0	100	207	0	0
1000/2:Corrosion	ft	207	0	0	0	0	100	207	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	43	0	0	0	0	100	43	0	0
1190/3:Abrasion(PSC/RC)	ft	43	0	0	0	0	100	43	0	0
331/2:Re Conc Bridge Railing	ft	49	0	0	49	24	31	15	20	10
1080/2:Delamination/Spall/Patched Area	ft	24	0	0	100	24	0	0	0	0
1090/2:Exposed Rebar	ft	15	0	0	0	0	100	15	0	0
7000/2:Damage	ft	10	0	0	0	0	0	0	100	10
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1080/3:Delamination/Spall/Patched Area	each	4	0	0	100	4	0	0	0	0

Remarks: NBI Remarks: Not railing. Rusty girders. Lacks all signs,no bridge markers. 8/23/2012 - Narrow bridge sign on West Side only and no bridge end markers. 11/8/2016 - No signs present.

Alert Code 1: Scour under structure.

Alert Code 2: Spalling concrete on abutments exposing rebar.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 36-141-13.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Ramsey	26 Functional	Rural, Local
04 City	LAWTON TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 4 NORTH LAWTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 22' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 18' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	550822.7 5357467.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2006 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	4 Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	17 Ft.	90 Date of Last Inspection	November 20, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	38.06 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Trottier, Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPPLE, 120"X 50' CSP		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 36-141-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	150	100	150	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: 10/09/2006 - Bridge replaced with 3-10' dia steel pipe. NBI Remarks: Bridge replaced with csp 2006. 10/14/2014
- There is 4' of silt in all three Pipe. Silt in all 3 pipe 4' 11/20118

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 37-101-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Ransom	26 Functional	Rural, Local
04 City	HANSON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4W 10S OF FORT RANSOM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 22' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 01' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	574628.3 5135579.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 37 67 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	202 Gravel/Dir	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1976 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 1 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.8 Ft.	Underwater	N
48 Length of Max Span	30 Ft.	Other Special	N
49 Structure Length	32.15 Ft.	218 Channel Profile	1 48 06/25/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	30.8 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 37-101-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	256	100	256	0	0	0	0	0	0
206/2:Timber Column	each	16	50	8	50	8	0	0	0	0
1160/2:Crack (Timber)	each	8	0	0	100	8	0	0	0	0
216/1:Timber Abutment	ft	72	50	36	50	36	0	0	0	0
1020/1:Connection	ft	36	0	0	100	36	0	0	0	0
235/1:Timber Pier Cap	ft	72	50	36	50	36	0	0	0	0
1160/1:Crack (Timber)	ft	18	0	0	100	18	0	0	0	0
1900/1:Distortion	ft	36	50	18	50	18	0	0	0	0
8398/2:Slope Protection	each	2	0	0	100	2	0	0	0	0
2210/2:Movement	each	2	0	0	100	2	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No B&A end markers on corners. Riprap installed up & downstream of structure. Pile #'s 1 & 2 at Abutment 1, and Pile #'s 5 & 6 at Abutment 2 have weather cracks. ALL timber elements have minor shrinkage & weather cracking. Minor erosion behind NW and NE corners of deck. Minor erosion behind all wingwalls

Alert Code 1: West abutment backwall has minor shifting (gap).East bearing cap has minor rotation.

Alert Code 2: West abutment backwall has exposed the bottom of bottom plank. weather cracking on the bearing cap.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 37-117-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	40.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Ransom	26 Functional	Rural, Local
04 City	ISLAND PARK TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	2 SOUTH OF LISBON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 24' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 40' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	601483.2 5140791.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	4	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 12 22 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 7 14 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	8 Equal Desirable
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 17, 2019
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	12.8 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 06/20/2019
49 Structure Length	125.98 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	13.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	14.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 37-117-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,765	0	0	100	1,765	0	0	0	0
1180/1:Abrasion	sq.ft	1,765	0	0	100	1,765	0	0	0	0
Notes:Deck has abrasion in wheel paths with some steel nails exposed - 6/17/2019										
111/1:Timber Open Girder	ft	883	82	728	4	35	14	120	0	0
1160/1:Crack (Timber)	ft	155	0	0	23	35	77	120	0	0
Notes:North girder is cracked in Span #'s 2 & 4, and crushed in Span #3 - 6/17/2019										
202/3:Steel Column	each	2	100	2	0	0	0	0	0	0
206/3:Timber Column	each	24	0	0	96	23	4	1	0	0
1160/3:Crack (Timber)	each	24	0	0	96	23	4	1	0	0
Notes:All timber columns has shrinkage cracks - 6/17/2019										
216/2:Timber Abutment	ft	30	100	30	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	69	78	54	19	13	3	2	0	0
1140/1:Decay/Section Loss	ft	15	0	0	87	13	13	2	0	0
Notes:North end of east timber abutment cap is completely hollow and no bearing over Pile 5. - 6/17/2019										
332/1:Timb Bridge Railing	ft	253	0	0	98	248	2	5	0	0
1140/1:Decay/Section Loss	ft	248	0	0	100	248	0	0	0	0
Notes:All of timber rail has decay - 6/17/2019										
7000/1:Damage	ft	5	0	0	0	0	100	5	0	0
Notes:South rail has damage on the SW end. North rail has damage on NE end. - 6/17/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: PVC end markers at all corners. New ice nose has been installed on piers 3 & 4. Posted for narrow bridge and 10 ton both directions. Debris under structure and hanging in Pier 2. L channel attached to the bottom of north fascia girder of span # 2 & # 3. West end of south rail is damaged. Banks are eroded. - 6/17/2019

Alert Code 2: North end of east timber abutment cap is completely hollow and no bearing over Pile 5 (see pictures). Deck has abrasion of approx. 30% in the wheelpaths (1.5" of 4" deck thickness) . - 6/17/2019

Alert Code 3: North girder is cracked in Span #'s 2 & 4, and crushed in Span #3 - 6/17/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 37-118-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Ransom	26 Functional	Rural, Local
04 City	MOORE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SO. BRANCH MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST OF ENDERLIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 36' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 40' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	602035.4 5163361.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 35 64 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 38 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1983 106 Yr Reconstructed	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	80 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	January 22, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	30.5 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 06/24/2019
49 Structure Length	25.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	09/05/2017
51 Bridge Rdwy Width - Curb to Curb	30.8 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 37-118-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	840	50	420	50	420	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	420	0	0	100	420	0	0	0	0
13/2:Pre Concrete Deck	sq.ft	840	100	840	0	0	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	259	99	257	1	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
206/3:Timber Column	each	16	0	0	100	16	0	0	0	0
1150/3:Check/Shake	each	16	0	0	100	16	0	0	0	0
216/3:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	66	0	0	100	66	0	0	0	0
1150/1:Check/Shake	ft	66	0	0	100	66	0	0	0	0
331/1:Re Conc Bridge Railing	ft	52	0	0	100	52	0	0	0	0
1090/1:Exposed Rebar	ft	4	0	0	100	4	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B&A end markers on all corners. No posted loading or other signing. Minor scour under bridge. NE curb rail has collision damaged. Channel 3 has random cracking.

Alert Code 1: Spall on bottom of beam #'s 7 & 8 with exposed rebar, beam # 6 & # 7 has spalled. Moderate erosion behind NE and SE wingwalls.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 37-118-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	82.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Ransom	26 Functional	Rural, Local
04 City	LISBON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	SE PART OF LISBON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 25' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 40' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	601518.2 5143006.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 34 62 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 31 Tons
208 Dk Overburden	31 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1974 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	750 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	8.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	June 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	18 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.5 Ft.	Underwater	N
48 Length of Max Span	55 Ft.	Other Special	N
49 Structure Length	145.01 Ft.	218 Channel Profile	1 48 06/20/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	5.9 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	31.5 Ft.	213 Federal Aid Project Number	BRS-304(2)
52 Deck Width	39.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 37-118-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,564	95	4,336	5	228	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	228	0	0	100	228	0	0	0	0
Notes:Random cracking throughout asphalt overlay - 6/19/2019										
510/1:Wearing Surfaces	sq.ft	4,564	98	4,450	3	114	0	0	0	0
3210/1:Del/Spall/Patch/Pot(Wear Sur	sq.ft	228	50	114	50	114	0	0	0	0
Notes:Spalls at deck joints and wheel paths, some spalls have exposed rebar. - 6/19/2019										
104/1:Pre Clsd Box Girder	ft	1,594	91	1,442	9	145	0	7	0	0
1080/1:Delamination/Spall/Patched Ar	ft	7	0	0	0	0	100	7	0	0
Notes:Moderate spalls on bottom of Beam 10 in Span 1 at 4th post from west and spall in outside of Beam 11 in Span 3 at 3rd post from east. Minor spall on Beam 9 in Span 3. Spalls w/ exposed rebar in Beam 10 Span 1, Beam 11 at east abutment - 6/19/2019										
7000/1:Damage	ft	145	0	0	100	145	0	0	0	0
Notes:Moderate spalls on bottom of Beam 10 in Span 1 at 4th post from west and spall in outside of Beam 11 in Span 3 at 3rd post from east. Minor spall on Beam 9 in Span 3. Spalls w/ exposed rebar in Beam 10 Span 1, Beam 11 at east abutment - 6/19/2019										
210/3:Re Conc Pier Wall	ft	79	91	72	9	7	0	0	0	0
1080/3:Delamination/Spall/Patched Ar	ft	5	0	0	100	5	0	0	0	0
Notes:West side pier 2 has spall at beam 11 - 6/19/2019										
1130/3:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
Notes:Cracks counted in the pier wall - 6/19/2019										
215/1:Re Conc Abutment	ft	79	94	74	6	5	0	0	0	0
1130/1:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
Notes:Cracks counted in abutment wall - 6/19/2019										
330/1:Metal Bridge Railing	ft	289	100	289	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	289	93	269	7	20	0	0	0	0
1130/1:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
Notes:20 cracks counted in the concrete bridge railing - 6/19/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0
Notes:NW wingwall has spalls with rebar exposed. - 6/19/2019										

Remarks: Chain link fence on north side on sidewalk, B&A end markers on all corners. No posted load. Bridge Div: 8/27/2010 KLJ inspected & will continue to monitor this structure. Asphalt deck overlay has deterioration. Top of sidewalk is level at both abutments-tilted 1-1/4" in 2' at pier 2 & 1-3/4" at pier 3. 10/18 pier 2 1-3/8" in 2' and pier 3 1-7/8" in 2'. 6/19 pier 2 1-1/4" in 2' and pier 3 1-3/4" in 2'. County will monitor 5-3-05. 11/2009 beam rotated to 2". 10/2010-no change. 10/2012-no change. 9/2013-no change. 10/15 - Beam 11 tipped 5/8" in 2' Curb, sidewalk, and HBP are cracked over piers. North soffit has random cracking and effloresence. Beam 1 over pier 3 has spall. - 6/19/2019

Alert Code 1: Moderate spalls on bottom of Beam 10 in Span 1 at 4th post from west and spall in outside of Beam 11 in Span 3 at 3rd post from east. Minor spall on Beam 9 in Span 3. Spalls w/ exposed rebar in Beam 10 Span 1, Beam 11 at east abutment, and NW wing. - 6/19/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 37-118-14.0

Alert Code 3: North beam #11 is tipped outward $\frac{3}{8}$ " - $\frac{1}{2}$ " & cracking at the end over top of pier 3. Bottom of north beam is tilted $1\frac{3}{8}$ " in 2' at east abutment, and 1" in 2' at west abutment. 11/6/14: Beam #11 is tipped $1\frac{5}{8}$ " in 2' at west abutment & $1\frac{1}{4}$ " in 2' at east abutment; Beam #11 is tipped $\frac{5}{8}$ " in 2' at west abutment & $\frac{3}{4}$ " in 2' at east abutment - no change 10/16. 10/18 Bottom of beam 11 is tilted $1\frac{1}{2}$ " in 2' at east abutment, and 1" in 2' at west abutment. 6/19 Bottom of beam 11 is tilted 1" in 2' at east abutment, and 1" in 2' at west abutment. - 6/19/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 37-120-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	79.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Ransom	26 Functional	Rural, Local
04 City	LIBERTY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 SOUTH ENDERLIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 36' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 36' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	605996.2 5162269.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 16 29 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 11 21 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	303 Asphalt	209 Posted in "Tons"	12 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	24 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 05, 2018
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.3 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 06/24/2019
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	24.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 37-120-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	635	0	0	100	635	0	0	0	0
1180/1:Abrasion	sq.ft	635	0	0	100	635	0	0	0	0
510/1:Wearing Surfaces	sq.ft	635	100	635	0	0	0	0	0	0
156/1:Timber Floor Beam	ft	26	0	0	100	26	0	0	0	0
1180/1:Abrasion	ft	26	0	0	100	26	0	0	0	0
206/2:Timber Column	each	13	100	13	0	0	0	0	0	0
216/2:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	52	0	0	89	46	12	6	0	0
1020/1:Connection	ft	6	0	0	0	0	100	6	0	0
1140/1:Decay/Section Loss	ft	46	0	0	100	46	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: B&A end markers on approach corners. No signing or guardrail. Channel is rip rapped under bridge. South cap has minor rotation. Bolts thru Pile #'s 2, 4, 5, & 6 at south abutment are missing nuts. Cattle guard hanging off east side of bridge. Shims under cap at Pile #'s 2 & 3 at south abutment.

Alert Code 1: Minor damage to rail at SE corner.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 37-122-01.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Ransom	26 Functional	Rural, Major Collector
04 City	LIBERTY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03721 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST OF ENDERLIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	13.397	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 37' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 34' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	609161.4 5164115.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 28 52 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1984 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	525 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 09, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.8 Ft.	Underwater	N
48 Length of Max Span	52 Ft.	Other Special	N
49 Structure Length	142.06 Ft.	218 Channel Profile	1 48 06/24/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	32.2 Ft.	213 Federal Aid Project Number	CBRS-3721(52)
52 Deck Width	36.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 37-122-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	5,113	0	0	100	5,113	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	113	0	0	100	113	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	5,000	0	0	100	5,000	0	0	0	0
104/1:Pre Clsd Box Girder	ft	709	100	709	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	72	100	72	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	72	90	65	10	7	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	1	0	0	100	1	0	0	0	0
1130/2:Cracking (RC and Other)	ft	6	0	0	50	6	0	0	0	0
331/1:Re Conc Bridge Railing	ft	285	80	229	20	56	0	0	0	0
1130/1:Cracking (RC and Other)	ft	56	0	0	140	56	0	0	0	0
333/1:Other Bridge Railing	ft	285	100	285	0	0	0	0	0	0
8398/2:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: No end markers. Silt build up in channel both sides of structure. USGS unit installed on east rail over pier # 2. slope protection has slid to the chanel. Minor deck wear. Flexural cracking on deck over pier # 2., Vertical hairline cracks under all beam seats on North abutment and beam seat 5 has efflorescence. South abutment has a hairline crack under beamseat 2. hairline cracking on the concrete railing, Ashpalt on both both ends of deck due to roadway overlay.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 37-129-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	24.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Ransom	26 Functional	Rural, Local
04 City	SHENFORD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 1 SOUTH OF ANSELM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 30' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 25' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	620654.7 5152002.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	3 Steel	Load Rating and Posting	
		31 Design Load	Unknown
45 No. Spans in Main Unit	1		P Posted for load
46 No. Approach Spans	3	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 6 11 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 4 8 Tons
208 Dk Overburden	1 None	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	03 Tons
27 Yr Built	1915 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	2 Intolerable - Replace
	5 Waterway - Under	68 Deck Geometry	3 Intolerable - Correct
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	19 Ft. 6 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	June 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	18 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	Y 24 06/19/2019
47 Total Horizontal Clearance	17.1 Ft.	Underwater	N
48 Length of Max Span	87 Ft.	Other Special	N
49 Structure Length	138.12 Ft.	218 Channel Profile	1 48 06/24/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	17.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	15 Ft. 1 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 37-129-09.0

Structure Number: 37-129-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	2,454	0	0	0	0	100	2,454	0	0
1180/1:Abrasion	sq.ft	2,454	0	0	0	0	100	2,454	0	0
Notes:timber deck planks have minor to moderate abrasion and wear. - 6/19/2019										
107/2:Steel Opn Girder/Beam	ft	509	0	0	100	509	0	0	0	0
1000/2:Corrosion	ft	509	0	0	100	509	0	0	0	0
Notes:All steel elements have rust. - 6/19/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:steel protective coating failed - 6/19/2019										
113/2:Steel Stringer	ft	869	0	0	0	0	100	869	0	0
1000/2:Corrosion	ft	869	0	0	0	0	100	869	0	0
Notes:All steel elements have rust. - 6/19/2019										
515/2:Steel Protective Coating	sq.ft	869	0	0	0	0	100	869	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:steel protective coating has failed - 6/19/2019										
120/2:Steel Truss	ft	174	0	0	100	174	0	0	0	0
1000/2:Corrosion	ft	87	0	0	100	87	0	0	0	0
Notes:All steel elements have rust. - 6/19/2019										
1900/2:Distortion	ft	87	0	0	100	87	0	0	0	0
Notes:Steel members are bent and loose. - 6/19/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/19/2019										
152/2:Steel Floor Beam	ft	308	0	0	77	236	23	72	0	0
1000/2:Corrosion	ft	308	0	0	77	236	23	72	0	0
Notes:All steel elements have rust. - 6/19/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed. - 6/19/2019										
161/1:Stl Pin Pin/Han both	each	20	0	0	0	0	100	20	0	0
1000/1:Corrosion	each	20	0	0	0	0	100	20	0	0
Notes:All steel elements have rust. - 6/19/2019										
162/1:Stl Gus Plate	each	8	0	0	100	8	0	0	0	0
1000/1:Corrosion	each	8	0	0	100	8	0	0	0	0
Notes:All steel elements have rust. - 6/19/2019										
206/2:Timber Column	each	13	0	0	85	11	15	2	0	0
1140/2:Decay/Section Loss	each	4	0	0	100	4	0	0	0	0
Notes:4 pile have minor decay and section loss - 6/19/2019										
1150/2:Check/Shake	each	7	0	0	100	7	0	0	0	0

Structure Number: 37-129-09.0

Notes:Timber columns have minor check/shake - 6/19/2019										
1170/2:Split/Delamination (Timber)	each	2	0	0	0	0	100	2	0	0
Notes:Pile #'s 1&5 at North abutment are split. - 6/19/2019										
216/2:Timber Abutment	ft	36	0	0	0	100	36	0	0	0
1160/2:Crack (Timber)	ft	36	0	0	0	100	36	0	0	0
Notes:Timber elements have minor cracking throughout structure - 6/19/2019										
231/2:Steel Pier Cap	ft	36	0	0	0	100	36	0	0	0
1000/2:Corrosion	ft	36	0	0	0	100	36	0	0	0
Notes:Steel pier caps have minor erosion - 6/19/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed. - 6/19/2019										
235/2:Timber Pier Cap	ft	52	0	0	96	50	4	2	0	0
1170/2:Split/Delamination (Timber)	ft	2	0	0	0	0	100	2	0	0
Notes:Pier 4 cap cracked - 6/19/2019										
1900/2:Distortion	ft	50	0	0	0	100	50	0	0	0
Notes:Abutment caps are rotating. - 6/19/2019										
330/1:Metal Bridge Railing	ft	276	0	0	82	226	18	50	0	0
1000/1:Corrosion	ft	216	0	0	0	100	216	0	0	0
Notes:Metal rail is rusting. - 6/19/2019										
1020/1:Connection	ft	10	0	0	0	100	10	0	0	0
Notes:Both East and West metal rail have traffic impact damage. - 6/19/2019										
7000/1:Damage	ft	50	0	0	0	0	100	50	0	0
Notes:Both East and West metal rail have traffic impact damage. - 6/19/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating is no longer effective throughout structure - 6/19/2019										
332/1:Timb Bridge Railing	ft	276	0	0	0	0	50	138	50	138
1140/1:Decay/Section Loss	ft	138	0	0	0	0	100	138	0	0
Notes:Timber curb is partially attached to the deck with nails, the curb is damaged or missing. - 6/19/2019										
7000/1:Damage	ft	138	0	0	0	0	0	0	100	138
Notes:Timber curb is partially attached to the deck with nails, the curb is damaged or missing. - 6/19/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
1900/2:Distortion	each	2	100	2	0	0	0	0	0	0
6000/2:Scour	each	2	100	2	0	0	0	0	0	0

Remarks: NBI Remarks: All caissons have been repaired by installing a concrete collar around them. Collision damage to railing. Truss has eye bars. Signed for 3 ton. Signed for 15'-1". Posted for narrow bridge on both ends. B&A end markers at NE, NW, SW corners. Timber bolted to Stringer #'s 2,6,&9 in north approach span and to #'s 2,5,&9 in south approach span. Span 1 outside stringers 1 and 10 have minor tilt due to collision damage. All timber elements have signs of weathering. Timber curb partially attached to deck. Pier 4 cap cracked. South abutment pile weather checked.10/2018 - 2U West and 2U East no threads on pin. 3U East Rivet missing. 3U West pack rust near bolted connection. 4U West small gap between pin, nut and plate. - 6/19/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 37-129-09.0

Alert Code 1: One of the pair of U1-L1 members on the east side of the structure is very loose while the other is taut-no sign of breaking or damage. Deck planks are worn, loose, and cracked. Abutment caps are rotating. Major rust on all metal components. Member from U2 to L3 repaired in two places-no change, This repair done in 10/11. Pile #'s 1&5 at North abutment are split. - 6/19/2019

Alert Code 3: Tension members U1-L1 Lt, and U3-L2 Rt have been repaired. U2-L3 Lt is cracked and welded in 2 places. - 6/19/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 38-105-05.2

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	48.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Renville	26 Functional	Rural, Local
04 City	STAFFORD TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SOURIS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	14 WEST 4 SOUTH SHERWOOD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 55' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 55' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	285614.4 5422989.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	4	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 30 55 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 33 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1935 106 Yr Reconstructed	1961	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	2019	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	February 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	18 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	20.7 Ft.	Underwater	N
48 Length of Max Span	31 Ft.	Other Special	N
49 Structure Length	111.88 Ft.	218 Channel Profile	1 48 06/06/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	20.7 Ft.	212 Structure Load Rated	09/05/2017
52 Deck Width	21.7 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 38-105-05.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	741	0	0	97	721	3	20	0	0
206/3:Timber Column	each	28	0	0	93	26	0	0	7	2
1150/3:Check/Shake	each	26	0	0	100	26	0	0	0	0
Notes:Weather checked - 2/20/2019										
7000/3:Damage	each	2	0	0	0	0	0	0	100	2
Notes:9-25-2018 - First 2 piling on north side of pier 2 knocked away from bridge. - 2/20/2019										
215/2:Re Conc Abutment	ft	46	0	0	100	46	0	0	0	0
1130/2:Cracking (RC and Other)	ft	46	0	0	100	46	0	0	0	0
Notes:West and East abutment have minor to moderate cracking. - 2/20/2019										
235/2:Timber Pier Cap	ft	72	0	0	93	67	7	5	0	0
1150/2:Check/Shake	ft	67	0	0	100	67	0	0	0	0
Notes:Weather checked. Pier four cap has deep weather check full length along bottom. - 2/20/2019										
1160/2:Crack (Timber)	ft	5	0	0	0	0	100	5	0	0
Notes:Pier 1 cap has long crack entire length. 5' is #3 the remainder under 1150 #2 - 2/20/2019										
331/1:Re Conc Bridge Railing	ft	223	100	222	0	1	0	0	0	0
1090/1:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
332/1:Timb Bridge Railing	ft	223	100	223	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Two large spalls in driving surface of channel beams. Pier three leaning slightly to the east. Construction joint in deck not centered on pier cap. Sway bracing has minor collision damage. Minor drift caught in span 1 and 3. West abut leaning inward 1 1/2" in 4'. North curb has exposed rebar 20' from west end. End markers are up. 10/2010 - SPAN 1 - 12' OF BOTT. OF 3RD CHANNEL BEAM FROM N. HAS LONG CRACK & SPALLING EXPOSING REBAR. 9/2016- N. End of pier 2 cap unsupported. County closed the bridge 2/2019 per Local Government. nmh - 2/20/2019

Alert Code 1: In span 2 and 3 there are spalls over nearly all stirrup bars in the channel beams, rebar is exposed. East abut leaning toward channel 12.5" at SE end and 5" at NE end or (3" in NE corner and 4 1/2" in SE corner in 4'). Debris lodged in all spans. - 2/20/2019

Alert Code 3: North girder in span 1 & 2 rest on unsupported cap. . Sway brace also broke. - 2/20/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 38-110-36.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Renville	26 Functional	Rural, Local
04 City	WHITE ASH TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DES LACS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH AND 2 WEST CARPIO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 28' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 47' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	293119.8 5373346.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 37 67 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 40 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	41 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 26, 2018
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.6 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 06/06/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	09/05/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 38-110-36.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	200	95	190	5	10	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	200	95	190	5	10	0	0	0	0
206/1:Timber Column	each	12	0	0	100	12	0	0	0	0
1150/1:Check/Shake	each	12	0	0	100	12	0	0	0	0
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	52	50	26	50	26	0	0	0	0
1150/2:Check/Shake	ft	52	50	26	50	26	0	0	0	0
331/2:Re Conc Bridge Railing	ft	49	98	48	2	1	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	49	98	48	2	1	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
1140/3:Decay/Section Loss	each	4	50	2	50	2	0	0	0	0

Remarks: NBI Remarks: Back planks are pulling away from all wing piling. Piling have minor to moderate weather checks. Some debris scuffing on upstream members. Third and fourth piling from east, in south abutment, starting to rupture around a knot. East curb is spalled. No bridge rails. Bank erosion by wingwalls was repaired with riprap. Extensive bank erosion downstream from bridge. Wing wall piling show minor crushing where deadman anchors attach. A couple of back planks, in north abutment are beginning to rupture. Small spalls developing at various locations along bottom of channel beams. River channel moving laterally adjacent to NE wing. 1'x4' hole in NE corner of abutment and wingwall. 1'x3' hole in NW corner of abutment and wingwall No end markers. Dry rot in SE wing piling. Slight rotation in SW corner of south abutment. 30'moderate scour hole east of bridge. 9/26/2018 - North load limit sign missing.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 38-112-37.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Renville	26 Functional	Rural, Local
04 City	WHITE ASH TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DES LACS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 2 WEST OF CARPIO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 28' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 45' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	295877.7 5372259.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 32 58 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 14 26 Tons
208 Dk Overburden	100 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2000 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	October 24, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	72 Ft.	Other Special	N
49 Structure Length	76.12 Ft.	218 Channel Profile	1 48 06/06/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.5 Ft.	213 Federal Aid Project Number	FEMA 1279
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 38-112-37.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	2,336	100	2,336	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	289	100	289	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	151	100	151	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3410/2:Chalk(Steel Protect Coatings)	sq.ft	100	0	0	100	100	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: New structure built in fall of 2000. Abutment inslopes heavily riprapped. 9/2016- Minor Cracking started on deck 10/24/2018 - North (uphill) approach roadway washes exposing the back edges of abutment.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 38-119-27.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Renville	26 Functional	Rural, Major Collector
04 City	COLQUHOUN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03828 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LAKE DARLING	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF GRAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	10.298	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 36' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 37' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	307081.3 5387836.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 42 76 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 18 34 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1975 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	140 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	24.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	October 24, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	Y 60 07/20/2018
48 Length of Max Span	57 Ft.	Other Special	N
49 Structure Length	180.12 Ft.	218 Channel Profile	1 48 06/06/2017
50 Curb/Sidewalk Widths	3.9 Ft Rt-Side	Chaining Date	None
	1.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	07/05/2017
	29.9 Ft.	213 Federal Aid Project Number	BRS-823(5)
52 Deck Width	38.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 38-119-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	5,403	67	3,604	0	0	33	1,799	0	0
1130/3:Cracking (RC and Other)	sq.ft	3,604	100	3,604	0	0	0	0	0	0
1190/3:Abrasion(PSC/RC)	sq.ft	1,800	0	0	0	0	100	1,800	0	0
104/2:Pre Clsd Box Girder	ft	850	99	838	1	12	0	0	0	0
202/1:Steel Column	each	16	0	0	100	16	0	0	0	0
1000/1:Corrosion	each	16	0	0	100	16	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	79	100	79	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	79	0	0	98	77	3	2	0	0
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
330/2:Metal Bridge Railing	ft	180	100	180	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	361	95	344	4	15	1	2	0	0
1080/2:Delamination/Spall/Patched Area	ft	15	0	0	100	15	0	0	0	0
1090/2:Exposed Rebar	ft	2	0	0	0	0	100	2	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Moderate erosion behind NW wing. NBI Remarks: All end markers in place. Deck has several large areas of concrete scale; also transverse hairline cracks. Vertical hairline cracks in concrete curbs. Long, longitudinal hairline cracks were found on outside of north box beams in spans two and three. A 1 1/2 ft. square area of spalling was found in north abutment; piling is exposed. Concrete abutment also showing some deterioration below high water line. Short section of bottom of west abutment, exposed by settlement of embankment (toward SW end). SW and NE end markers are up. Settlement of embankment has left noticeable bumps in both bridge approaches. Moderate to severe scaling of deck surface has been covered with a chip seal. 1.5'x1.0' spall with exposed rebar in north curb near 3rd rail post in from west end. Bolts and or nuts missing that attach pedestrian rail to bridge. 12' of box beams chipped during riprap installation. Rebar exposed in concrete curb - 15'. 10/2016-10 Feet exposed concrete deck abraided. 6' N Side and 4' S side along entire length.

Alert Code 1: Short sections of rebar exposed, in deck surface, 30 ft. in from east end, rebar beginning to rust.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 38-121-36.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Renville	26 Functional	Rural, Local
04 City	PLAIN TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 2 NORTH OF CARPIO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 28' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 34' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	309200.2 5372510.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 44 80 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 41 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	201 Gravel/Dirt	209 Posted in "Tons"	45 Tons
Age and Service		Appraisal	
27 Yr Built	1927 106 Yr Reconstructed	1974	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	October 24, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	25 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 06/06/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Devries
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 38-121-36.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	184	100	184	0	0	0	0	0	0
206/1:Timber Column	each	12	0	0	100	12	0	0	0	0
1150/1:Check/Shake	each	12	0	0	100	12	0	0	0	0
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/3:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	49	100	49	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	49	49	24	51	25	0	0	0	0
1150/2:Check/Shake	ft	49	49	24	51	25	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Substandard curbs and rails. Some of the concrete rail posts have well defined cracks around lower bolt holes. That attach member to structure. Abutment piling have minor to moderate weather checking. End marker missing in NE & SW corner.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 38-141-34.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Renville	26 Functional	Rural, Major Collector
04 City	PRESCOTT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03836 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH 4 EAST GLENBURN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	7.299	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 30' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 08' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	341856.1 5374312.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2013 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	300 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 14, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	10/03/2014
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Devries, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12 X 5 X 65.5' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 38-141-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	132	100	132	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Gaps in joints up to 2".

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 38-142-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Renville	26 Functional	Rural, Local
04 City	PRESCOTT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 2 SOUTH GLENBURN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 29' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 07' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	342973.8 5372879.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	20 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	65 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 14, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	32.15 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	SOS-38(2)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Devries, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
TRIPLE, 10X6X42' RCB			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 38-142-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	125	98	122	2	3	0	0	0	0
1130/2:Cracking (RC and Other)	ft	125	98	122	2	3	0	0	0	0
4000/1:Settlement	each	1	100	1	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: A few vertical hairline cracks in barrel walls. Also vertical cracks where wings tie to parapets in SE and NW corners. Minor channel scour on both ends of culvert. Construction joint separated 1 1/2". End markers are up. East half of box has settled 3/4" in north barrel. Small spall at top of NW wing. A spall has opened up over an 8"x8" honeycomb area in NE wing.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 38-144-36.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Renville	26 Functional	Rural, Local
04 City	PRESCOTT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SPRING COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 3 SOUTH GLENBURN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 28' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 04' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	346178.2 5372044.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	30 Tons
27 Yr Built	1981 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	November 14, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	21.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	32.15 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-38(5)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Devries, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10X6X42' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 38-144-36.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	125	96	120	4	5	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
1130/2:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Diagonal hairline cracks in SW wing. Efflorescence along hairline cracks in parapets. Vertical cracks where wings tie to parapets at all corners of box. Settlement of embankment has left sizeable depressions in road shoulders on both approaches to culvert. Small yellow end markers at NW and SE corners of box. Hairline map cracking at upper inner corner of SE wing. 11/14/2018 - 1'x1' delamination in SW & NW corners where they meet wing. 11/14/2018 - South Load Limit Sign Illegible.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-106-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	26.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	WYNDMERE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 1 WEST WYNDMERE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 13' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 09' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	642233.4 5119899.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 10 18 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 6 11 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	03 Tons
Age and Service		Appraisal	
27 Yr Built	1917 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 24, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 11/06/2018
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.7 Ft.	Other Special	N
48 Length of Max Span	40 Ft.	218 Channel Profile	1 48 06/24/2019
49 Structure Length	42.00 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-106-29.0

North Dakota Department of Transportation
Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 39-106-29.0

[illegible]

Structure Number: 39-106-29.0

216/3:Timber Abutment	ft	39	0	0	0	0	100	39	0	0
1900/3:Distortion	ft	39	0	0	0	0	100	39	0	0
Notes:Both abutments and pile are bowing and out of plane. - 6/24/2019										
231/1:Steel Pier Cap	ft	39	0	0	0	0	100	39	0	0
1900/1:Distortion	ft	39	0	0	0	0	100	39	0	0
Notes:Steel abutment caps are bent, cracked, and distorted. The south cap is cracked at Stringers 3, 5, 7, 8, & 9. The north cap is cracked at Stringers 2, 4, 6, & 7. The crack above Stringer 7 extends through the top 1/2 of the cap. - 6/24/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has completely failed - 6/24/2019										
313/1:Fixed Bearing	each	4	0	0	0	0	100	4	0	0
1000/1:Corrosion	each	4	0	0	0	0	100	4	0	0
Notes:Bearings are rusty and the steel protective coating has completely failed - 6/24/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has completely failed. - 6/24/2019										
330/1:Metal Bridge Railing	ft	85	0	0	0	0	100	85	0	0
7000/1:Damage	ft	85	0	0	0	0	100	85	0	0
Notes:Rails have damage from traffic impacts - SE & NW sections are missing. - 6/24/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has completely failed - 6/24/2019										
332/1:Timb Bridge Railing	ft	85	0	0	100	85	0	0	0	0
1150/1:Check/Shake	ft	85	0	0	100	85	0	0	0	0
Notes:Timber bridge rail has checks/shakes throughout rail. - 6/24/2019										
4000/3:Settlement	each	1	100	1	0	0	0	0	0	0
6000/2:Scour	each	1	100	1	0	0	0	0	0	0
7356/1:Steel Cracking/Fatigue	each	1	0	0	100	1	0	0	0	0
Notes:Steel abutment caps are bent, cracked, and distorted. The south cap is cracked at Stringers 3, 5, 7, 8, & 9. The north cap is cracked at Stringers 2, 4, 6, & 7. The crack above Stringer 7 extends through the top 1/2 of the cap. - 6/24/2019										
7357/1:Pack Rust	each	1	0	0	100	1	0	0	0	0
Notes:Pack rust at all upper chord plates. - 6/24/2019										
7362/1:Superstructure Traffic Impact	each	1	0	0	100	1	0	0	0	0
Notes:Pack rust at all upper chord plates. - 6/24/2019										
7363/1:Steel Section Loss	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Yellow markers on end posts. Vertical curve & side road - south. Debris across channel to the west. 2" of gravel on deck. Bolts used to replace missing rivets at end posts. 2017: Cracks in steel abutment caps welded and missing cap bolts were replaced. - 6/24/2019 5.5ft wide by 9ft deep washout on the north side of structure. Bridge has been closed by the county 6/24/19 --10/19 Comment moved from Critical Finding - cta

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-106-29.0

- Alert Code 1:** Pack rust at all upper chord plates. Rivets missing at bottom of all end posts for rail attachments. Rails have damage from traffic impacts - SE & NW sections are missing. - 6/24/2019
- Alert Code 2:** Stringers are misaligned. All lower laterals are loose, especially the south. West diagonals & counters are bent. Both abutments and pile are bowing and out of plane. 2006: N abut pile is out of plumb 1-5/8"/2'; 11/14: NW 1-1/2", NE 2-1/2"; 1/18: NW 1-1/2", NE 1-1/2". - 6/24/2019
- Alert Code 3:** Steel abutment caps are bent, cracked, and distorted. The south cap is cracked at Stringers 3, 5, 7, 8, & 9. The north cap is cracked at Stringers 2, 4, 6, & 7. The crack above Stringer 7 extends through the top 1/2 of the cap. Entire paint system has failed and all steel members are rusty. - 6/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-108-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	30.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	BELFORD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	8 WEST 2 NORTH WALCOTT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 34' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 07' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	643557.8 5159045.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	3 Steel	Load Rating and Posting	
		31 Design Load	Unknown
45 No. Spans in Main Unit	1		P Posted for load
46 No. Approach Spans	2	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 4 7 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 2 5 Tons
208 Dk Overburden	1 None	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	04 Tons
27 Yr Built	1918 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	2 Intolerable - Replace
	5 Waterway - Under	68 Deck Geometry	3 Intolerable - Correct
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	2 Intolerable - Replace
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	June 27, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	18 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	Y 96 06/27/2019
47 Total Horizontal Clearance	17.4 Ft.	Underwater	N
48 Length of Max Span	73 Ft.	Other Special	N
49 Structure Length	111.88 Ft.	218 Channel Profile	Y 48 07/01/1997
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	17.4 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	18.4 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Kirkevold
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-108-05.0

Structure Number: 39-108-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	2,056	56	1,156	42	861	2	39	0	0
1020/1:Connection	sq.ft	245	0	0	84	206	16	39	0	0
Notes:Loose deck planks, and several gaps of up to 6" between planks. Planks are broken from traffic impacts. - 6/27/2019										
1140/1:Decay/Section Loss	sq.ft	102	0	0	100	102	0	0	0	0
Notes:Loose deck planks, and several gaps of up to 6" between planks. Planks are broken from traffic impacts. - 6/27/2019										
1170/1:Split/Delamination (Timber)	sq.ft	40	0	0	100	40	0	0	0	0
Notes:Loose deck planks, and several gaps of up to 6" between planks. Planks are broken from traffic impacts. - 6/27/2019										
1180/1:Abrasion	sq.ft	513	0	0	100	513	0	0	0	0
Notes:Loose deck planks, and several gaps of up to 6" between planks. Planks are broken from traffic impacts. - 6/27/2019										
107/1:Steel Opn Girder/Beam	ft	351	0	0	83	290	6	21	11	40
1000/1:Corrosion	ft	290	0	0	100	290	0	0	0	0
Notes:Entire structure has moderate to heavy rust. - 6/27/2019										
2210/1:Movement	ft	40	0	0	0	0	0	0	100	40
Notes:Both fascia girders in north span are tipped in at approx. 45 degree angles due to traffic impacts with bridge rail: - 6/27/2019										
7362/1:Superstructure Traffic Impact	ft	21	0	0	0	0	100	21	0	0
Notes:Both fascia girders in north span are tipped in at approx. 45 degree angles due to traffic impacts with bridge rail: - 6/27/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/27/2019										
113/1:Steel Stringer	ft	512	0	0	96	490	4	22	0	0
1000/1:Corrosion	ft	490	0	0	100	490	0	0	0	0
Notes:Entire structure has moderate to heavy rust. - 6/27/2019										
1900/1:Distortion	ft	22	0	0	0	0	100	22	0	0
Notes:East fascia girder in south span is tipped in. - 6/27/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/27/2019										
120/1:Steel Truss	ft	148	0	0	100	148	0	0	0	0
1000/1:Corrosion	ft	146	0	0	100	146	0	0	0	0
Notes:Entire structure has moderate to heavy rust. - 6/27/2019										
1900/1:Distortion	ft	2	0	0	100	2	0	0	0	0
Notes:Sway brace #4 Rt is bent - 6/27/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/27/2019										
152/1:Steel Floor Beam	ft	79	0	0	100	79	0	0	0	0
1000/1:Corrosion	ft	79	0	0	100	79	0	0	0	0

Structure Number: 39-108-05.0

Notes:Entire structure has moderate to heavy rust. - 6/27/2019

515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100

Notes:Steel protective coating has failed - 6/27/2019

162/1:Stl Gus Plate	each	44	0	0	100	44	0	0	0	0
1000/1:Corrosion	each	43	0	0	100	43	0	0	0	0

Notes:Entire structure has moderate to heavy rust. - 6/27/2019

7000/1:Damage	each	1	0	0	100	1	0	0	0	0

Notes:Bullet hole in one of the gusset plates - 6/27/2019

202/2:Steel Column	each	10	0	0	0	0	100	10	0	0
1000/2:Corrosion	each	10	0	0	0	0	100	10	0	0

Notes:Entire structure has moderate to heavy rust. - 6/27/2019

515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100

Notes:Steel protective coating has failed - 6/27/2019

216/2:Timber Abutment	ft	43	47	20	54	23	0	0	0	0
1150/2:Check/Shake	ft	23	0	0	100	23	0	0	0	0

Notes:North abutment is bowed - 6/27/2019

231/1:Steel Pier Cap	ft	75	0	0	89	67	11	8	0	0
1000/1:Corrosion	ft	55	0	0	100	55	0	0	0	0

Notes:Entire structure has moderate to heavy rust. - 6/27/2019

1900/1:Distortion	ft	20	0	0	60	12	40	8	0	0

Notes:Both abutment caps are bent - 6/27/2019

515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100

Notes:Steel protective coating has failed - 6/27/2019

313/1:Fixed Bearing	each	4	0	0	100	4	0	0	0	0
1000/1:Corrosion	each	4	0	0	100	4	0	0	0	0

Notes:Entire structure has moderate to heavy rust. - 6/27/2019

515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100

Notes:Steel protective coating has failed - 6/27/2019

330/1:Metal Bridge Railing	ft	223	0	0	81	180	19	43	0	0
1000/1:Corrosion	ft	180	0	0	100	180	0	0	0	0

Notes:Entire structure has moderate to heavy rust. - 6/27/2019

1900/1:Distortion	ft	43	0	0	0	0	100	43	0	0

Notes:Metal bridge rail damaged due to traffic impact. - 6/27/2019

515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100

Notes:Steel protective coating has failed - 6/27/2019

Structure Number: 39-108-05.0

332/1:Timb Bridge Railing	ft	223	0	0	89	199	11	24	0	0
1140/1:Decay/Section Loss	ft	24	0	0	0	0	100	24	0	0
Notes:Timber curb has damage and section loss on the North and South end - 6/27/2019										
1150/1:Check/Shake	ft	199	0	0	100	199	0	0	0	0
Notes:Timber curb has check/shake throughout the structure - 6/27/2019										
6000/2:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Scour at South end of structure - 6/27/2019										
7357/1:Pack Rust	each	1	0	0	0	0	100	1	0	0
Notes:Entire structure has moderate to heavy rust. - 6/27/2019										
7362/1:Superstructure Traffic Impact	each	1	0	0	0	0	0	0	100	1
Notes:Major traffic impact to North and South ends of bridge rail - 6/27/2019										
7363/1:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Steel section loss on the caissons - 6/27/2019										
8401/2:Wings	each	4	0	0	0	0	50	2	50	2
4000/2:Settlement	each	2	0	0	0	0	100	2	0	0
Notes:SW and NE wingwalls have settled - 6/27/2019										
7000/2:Damage	each	2	0	0	0	0	0	0	100	2
Notes:NW and SE wingwalls are damaged - 6/27/2019										

Remarks: B&W end markers on west side only. Sharp horiz. curves - both directions. Minor channel debris. SE & NW channel banks are eroding. Posted for 4 tons. Protruding bolt on L3 Lt. Conduit attached to west railing across the bridge. - 6/27/2019

Alert Code 1: Railing has collision damage. Sway brace #4 rt is bent. Bullet indent in U4-L4 rt. Minor erosion on both banks. Pile in both abutments are pushing out on top. Erosion behind all wingwalls. Loose deck planks, and several gaps of up to 6" between planks. Piles in North wingwalls are bent and planks are broken from traffic impacts. - 6/27/2019

Alert Code 2: Entire structure has moderate to heavy rust. Rivets are missing in NW & SW caissons & are splitting. East fascia girder in south span is tipped in. - 6/27/2019

Alert Code 3: Both fascia girders in north span are tipped in at approx. 45 degree angles due to traffic impacts with bridge rail: emailed L. Bladow-Richland County on 11/9/18. - 6/27/2019

Fracture Critical: Inspection was completed at arms length with a hammer, extendable mirror and binoculars. See filenet documents on 11-08-2018 for report and pictures. - 6/27/2019

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SEC 409

Structure Number: 39-108-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	27.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	DANTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 1 EAST WYNDMERE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 12' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 06' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	645380.8 5119156.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 0 0 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 0 0 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	03 Tons
Age and Service		Appraisal	
27 Yr Built	1918 106 Yr Reconstructed -1	67 Structural Condition	0 Closed
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 24, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	Y 24 01/23/2017
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.1 Ft.	Other Special	N
48 Length of Max Span	49 Ft.	218 Channel Profile	Y 48 06/17/2015
49 Structure Length	50.85 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 39-108-29.0

Structure Number: 39-108-29.0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-108-29.0

6000/2:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Scour under structure - 6/24/2019										
7357/1:Pack Rust	each	1	0	0	0	0	100	1	0	0
Notes:Pack rust has sheared 4 bolts in splice plate at u5 lt. L6 right gusset plate has heavy pack rust. - 6/24/2019										
7362/1:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	0	0	25	1	0	0	75	3
Notes:the wing walls have separated from the abutment - 6/24/2019										

Remarks: Posted for 3 tons. FC done 2010. Bridge closed 12/2010. Bridge closed 10/3/2012. 9/24/13: Bridge closed - vehicle tracks around the barricades, over top of gravel piles on both sides, and across the bridge. There is also a hole burned through the middle of the deck. 11/14 closed but traffic across, Lowell-Richland County emailed. NOV 19 2016 , REMAIN CLOSED SINCE 10/15 . 11/18: Bridge closed - vehicle tracks around the barricades and across the bridge. Bridge still closed 6-24-19 - 6/24/2019

Alert Code 1: N. abutment undermined at east corner. - 6/24/2019

Alert Code 2: South abutment has major vertical cracking. North abutment has a large vertical crack in NE corner. Se & SW bearings are displaced. Pack rust has sheared 4 bolts in splice plate at u5 lt. L6 right gusset plate has heavy pack rust. All 4 bearing plates have 1" bearing - 6/24/2019

Alert Code 3: NE bearing plate is not touching abutment. M. Maneval met with Lowell Bladow-Richland Co. about closing this bridge on 11/17/10. - 6/24/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-109-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	25.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	DANTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 4 SOUTH WYNDMERE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 12' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 05' 40.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	647016.3 5118364.3	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	2 Critical
99 Border Bridge Struct No.	–	59 Superstructure	2 Critical
Structure Type and Material		60 Substructure	2 Critical
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 0 0 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 0 0 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	03 Tons
Age and Service		Appraisal	
27 Yr Built	1919 106 Yr Reconstructed	1955	
42 Type of Service	1 Highway - On	67 Structural Condition	0 Closed
	5 Waterway - Under	68 Deck Geometry	3 Intolerable - Correct
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	3 Intolerable - Correct
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	13 Ft.	90 Date of Last Inspection	September 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	Y 24 11/01/2010
47 Total Horizontal Clearance	16.7 Ft.	Underwater	N
48 Length of Max Span	47 Ft.	Other Special	N
49 Structure Length	48.88 Ft.	218 Channel Profile	Y 48 06/17/2015
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	18.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevoid, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 39-109-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	883	0	0	100	883	0	0	0	0
113/1:Steel Stringer	ft	344	0	0	0	0	0	0	100	344
1000/1:Corrosion	ft	344	0	0	0	0	0	0	100	344
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
120/1:Steel Truss	ft	98	0	0	0	0	100	98	0	0
1000/1:Corrosion	ft	98	0	0	0	0	100	98	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
152/1:Steel Floor Beam	ft	59	0	0	0	0	100	59	0	0
1000/1:Corrosion	ft	59	0	0	0	0	100	59	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	49	0	0	0	0	0	0	100	49
313/1:Fixed Bearing	each	4	0	0	50	2	0	0	50	2
1000/1:Corrosion	each	4	0	0	50	2	0	0	50	2
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	98	0	0	0	0	100	98	0	0
1000/1:Corrosion	ft	98	0	0	0	0	100	98	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	98	0	0	100	98	0	0	0	0
6000/2:Scour	each	1	0	0	100	1	0	0	0	0
7357/1:Pack Rust	each	1	0	0	0	0	100	1	0	0
7363/1:Steel Section Loss	each	1	0	0	0	0	100	1	0	0
8401/1:Wings	each	4	0	0	25	1	0	0	75	3

Remarks: Bridge Closed 1/11/2012. South abutment has washed out. 11/13 - structure is closed but traffic is still driving across, e-mailed Lowell - Richland County. SW & SE Wingwalls have broken away. SW has been replaced with timber. SE separation has been filled with timber planks. B&A end markers on all four end posts. Bridge closed 2012. Structure closed 10/3/2012. 9/24/13 - Bridge Closed. Nove 23, 2016 Structure remained closed since 1/11/2012. Nov 2, 2017 Structure remained closed since 1/11/2012. has metal beam welded across structure and type 1s one each end of structure. 11/18: Structure closed. 9/19: Structure closed. - 9/19/2019

Alert Code 1: Entire structure has moderate rust. Minor to moderate erosion under structure. Sway braces nos. 1 & 2 - west are bent. Loose bolts between sway braces and bottom chord - No.1 west, Nos.1 & 2 east. Moderate channel scour in sw quadrant. Minor shoulder erosion behind nw wingwall. Timber planking in se wingwall has failed. - 9/19/2019

Alert Code 2: Concrete abutments have heavy deterioration - south is the worst with severe cracking, spalling, & missing sections. Floor beam No. 3 is bowed. - 9/19/2019

Fracture Critical: 9/19: Structure closed. - 9/19/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-109-30.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	47.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	DANTON TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 4 SOUTH WYNDMERE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 12' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 05' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	647021.2 5118659.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 13 23 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 7 14 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	25 Gravel/Dirt	209 Posted in "Tons"	03 Tons
Age and Service		Appraisal	
27 Yr Built	1933 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2018	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 06, 2018
32 Approach Roadway Width	13 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.4 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 06/22/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	02/15/2017
51 Bridge Rdwy Width - Curb to Curb	17.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 39-109-30.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	463	0	0	100	463	0	0	0	0
1180/1:Abrasion	sq.ft	463	0	0	100	463	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	226	0	0	100	226	0	0	0	0
1000/1:Corrosion	ft	225	0	0	100	225	0	0	0	0
1020/1:Connection	ft	1	0	0	100	1	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
202/3:Steel Column	each	10	0	0	70	7	30	3	0	0
1000/3:Corrosion	each	7	0	0	70	7	0	0	0	0
7363/3:Steel Section Loss	each	3	0	0	0	0	100	3	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
216/3:Timber Abutment	ft	43	40	17	49	21	12	5	0	0
1140/3:Decay/Section Loss	ft	5	0	0	0	0	100	5	0	0
6000/3:Scour	ft	21	0	0	100	21	0	0	0	0
231/1:Steel Pier Cap	ft	36	0	0	100	36	0	0	0	0
1000/1:Corrosion	ft	35	0	0	97	35	0	0	0	0
1020/1:Connection	ft	1	0	0	100	1	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
330/1:Metal Bridge Railing	ft	49	0	0	100	49	0	0	0	0
1020/1:Connection	ft	49	0	0	100	49	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
332/1:Timb Bridge Railing	ft	49	0	0	100	49	0	0	0	0
1140/1:Decay/Section Loss	ft	49	0	0	100	49	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	0	0	0	0	0	0	100	1
7363/3:Steel Section Loss	each	1	0	0	0	0	0	0	100	1
8398/1:Slope Protection	each	1	0	0	0	0	0	0	100	1
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
1140/2:Decay/Section Loss	each	4	0	0	100	4	0	0	0	0

Remarks: Horiz. Curves both directions. B&A end markers on nw & sw corners only. New deck 2008. Posted for 3 tons. Beaver dam 50' west of structure.

Alert Code 1: Stringers, caps & piling have moderate rust. Scour at south abutment. Webs of south pile 1-4 rusted through have been repaired with plates. Bolts missing at pile 1 & stringer 3 on south abut.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-110-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	DANTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 4 SOUTH WYNDMERE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 11' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 04' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	648611.8 5117592.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		Railroad (live load for which structure was designated)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2001 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	January 17, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	50.2 Ft.	Underwater	N
48 Length of Max Span	32 Ft.	Other Special	N
49 Structure Length	34.12 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	50.5 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	52.5 Ft.	213 Federal Aid Project Number	BRO-39(010)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
SINGLE, 32X10X52.5' CONSPAN		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-110-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	52	58	30	42	22	0	0	0	0
1010/3:Cracking	ft	12	0	0	100	12	0	0	0	0
1090/3:Exposed Rebar	ft	10	0	0	100	10	0	0	0	0
8398/3:Slope Protection	each	4	0	0	100	4	0	0	0	0
2210/3:Movement	each	4	0	0	100	4	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B&A end markers on NW, NE, & SW corners. Side pipe at NE corner of structure. 1'X1' spall in roof in Section #5. Minor missaligment of sections. Insignificant cracking & exposed rebars on both headwalls.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-111-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	LIBERTY GROVE TOWNSH	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 1 NORTH MANTADOR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 11' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 03' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	650197.5 5116258.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 35 64 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 06, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	78 Ft.	Other Special	N
49 Structure Length	82.02 Ft.	218 Channel Profile	1 48 06/24/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.8 Ft.	213 Federal Aid Project Number	BRO-39(12)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 39-111-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,540	95	2,415	5	125	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	125	0	0	5	125	0	0	0	0
104/1:Pre Clsd Box Girder	ft	328	99	326	1	2	0	0	0	0
1110/1:Cracking (PSC)	ft	2	0	0	100	2	0	0	0	0
215/2:Re Conc Abutment	ft	62	92	57	8	5	0	0	0	0
1130/2:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
331/1:Re Conc Bridge Railing	ft	164	79	129	21	35	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
1130/1:Cracking (RC and Other)	ft	34	0	0	100	34	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
2210/3:Movement	each	2	0	0	100	2	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B&A end markers on all four corners. Horiz. Curve south. Vertical and horizontal curve on north side. Curve and intersection signs on both sides. Minor embankment erosion - se quadrant & sidepipe in nw quadrant. Minor channel debris. Minor abutment riprap displacement. . South abutment has vertical cracked under beam seat # 2 & # 3.

Alert Code 1: Beam 2 has a small crack on the east side of the beam, south end.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-113-14.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Major Collector
04 City	MANSEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03913 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ANTELOPE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 3 SOUTH OF COLFAX	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	50.589	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 25' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 00' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	652930.6 5143936.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	January 17, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	25.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	13 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBP-3913(88)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 9X6X46' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-113-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	138	65	90	35	48	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	24	0	0	100	24	0	0	0	0
1130/2:Cracking (RC and Other)	ft	24	0	0	100	24	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B&A end markers all four corners. Horizontal crack approx 4' above floor in both outside walls & along top chamfer at west end of both boxes. Minor random cracks w/ efflorescence & rust stains throughout structure. Heavy channel vegetation.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-113-32.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	24.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	LIBERTY GROVE TOWNSH	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST OF MANTADOR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 00' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	653555.5 5115153.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 5 10 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 2 4 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	24 Gravel/Dirt	209 Posted in "Tons"	03 Tons
Age and Service		Appraisal	
27 Yr Built	1912 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	3 Intolerable - Correct
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 24, 2019
32 Approach Roadway Width	13 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	Y 24 11/06/2018
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.7 Ft.	Other Special	N
48 Length of Max Span	44 Ft.	218 Channel Profile	1 48 06/24/2019
49 Structure Length	47.90 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-113-32.0

Structure Number: 39-113-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	861	0	0	100	861	0	0	0	0
1180/1:Abrasion	sq.ft	861	0	0	100	861	0	0	0	0
Notes:Deck has 4 in of gravel overburden - 6/24/2019										
113/1:Steel Stringer	ft	433	0	0	89	385	11	48	0	0
1000/1:Corrosion	ft	385	0	0	100	385	0	0	0	0
Notes:Moderate stringer rust. - 6/24/2019										
1900/1:Distortion	ft	48	0	0	0	0	100	48	0	0
Notes:Lower laterals are loose. - 6/24/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed. - 6/24/2019										
120/1:Steel Truss	ft	95	0	0	79	75	21	20	0	0
1000/1:Corrosion	ft	75	0	0	100	75	0	0	0	0
Notes:Steel truss has rust throughout structure - 6/24/2019										
1900/1:Distortion	ft	5	0	0	0	0	100	5	0	0
Notes:Impact damage to U1-L1 Lt, L1-U2 Rt, and U2-L2 Rt. - 6/24/2019										
7357/1:Pack Rust	ft	15	0	0	0	0	100	15	0	0
Notes:Pack rust has sheared off bolts at upper chord plates. Lower panel points have moderate pack rust. - 6/24/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel Protective coating has failed - 6/24/2019										
152/1:Steel Floor Beam	ft	39	0	0	100	39	0	0	0	0
1000/1:Corrosion	ft	39	0	0	100	39	0	0	0	0
Notes:Steel floor beams has moderate rust - 6/24/2019										
515/1:Steel Protective Coating	sq.ft	39	0	0	100	39	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/24/2019										
162/1:Stl Gus Plate	each	24	92	22	0	0	8	2	0	0
1900/1:Distortion	each	2	0	0	0	0	100	2	0	0
Notes:Gusset plates at U2-L2 Lt and U1-L1 Rt are damaged - 6/24/2019										
202/3:Steel Column	each	10	0	0	0	0	90	9	10	1
1000/3:Corrosion	each	6	0	0	0	0	83	5	17	1
Notes:Pile 3 web at south abutment is rusted through. - 6/24/2019										
1900/3:Distortion	each	4	0	0	0	0	100	4	0	0
Notes:Piles are bowed - 6/24/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/24/2019										
216/3:Timber Abutment	ft	39	0	0	100	39	0	0	0	0

Structure Number: 39-113-32.0

1020/3:Connection	ft	39	0	0	100	39	0	0	0	0
Notes:Timber abutment is bowed - 6/24/2019										
231/1:Steel Pier Cap	ft	39	0	0	100	39	0	0	0	0
1000/1:Corrosion	ft	39	0	0	100	39	0	0	0	0
Notes:Pier caps have minor rust - 6/24/2019										
515/1:Steel Protective Coating	sq.ft	39	0	0	100	39	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/24/2019										
313/1:Fixed Bearing	each	4	0	0	100	4	0	0	0	0
1020/1:Connection	each	4	0	0	100	4	0	0	0	0
Notes:Movement has sheared 2 bearing bolts at SE cap. - 6/24/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/24/2019										
330/1:Metel Bridge Railing	ft	95	0	0	0	0	100	95	0	0
7000/1:Damage	ft	95	0	0	0	0	100	95	0	0
Notes:bridge rail has a lot of traffic impact damage - 6/24/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed. - 6/24/2019										
332/1:Timb Bridge Railing	ft	95	0	0	100	95	0	0	0	0
1140/1:Decay/Section Loss	ft	95	0	0	100	95	0	0	0	0
Notes:Timber bridge rail is buried under gravel overburden - 6/24/2019										
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Abutments have settled - 6/24/2019										
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Scour under structure - 6/24/2019										
7357/1:Pack Rust	each	1	0	0	0	0	0	0	100	1
Notes:Pack rust has sheared off bolts at upper chord plates. Lower panel points have moderate pack rust. - 6/24/2019										
7363/1:Steel Section Loss	each	1	0	0	0	0	100	1	0	0
Notes:Pile 3 web at south abutment is rusted through. - 6/24/2019										
8401/3:Wings	each	4	0	0	25	1	75	3	0	0
4000/3:Settlement	each	4	0	0	25	1	75	3	0	0
Notes:wings have separated from abutment wall - 6/24/2019										

Remarks: Vertical curve north. Posted for 3 tons. USGS stream gauge mounted to east side of bridge. Bridge rails are damaged from traffic impacts. Jesse from Richland county said this structure is being replaced this year. - 6/24/2019

Alert Code 1: Moderate stringer rust. Lower laterals are loose. South abut. is out of plumb 1 1/2'; 2/2013: Pile 1 leaning south 3/4"/2'; Pile 5 leaning south 1/2"/2'; 2/2014: Pile 1= 3/8"/2', Pile 5=1/4"/2'. Moderate erosion behind NW, SW, & SE wingwalls, walls are bowed. Pack rust has sheared off bolts at upper chord plates. - 6/24/2019

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Structure Number: 39-113-32.0

Alert Code 2: Lower panel points have moderate pack rust. Movement has sheared 2 bearing bolts at SE cap. Stringer 2 in center panel is bowed. Gusset plates at U2-L2 Lt and U1-L1 Rt are damaged. Impact damage to U1-L1 Lt, L1-U2 Rt, and U2-L2 Rt. - 6/24/2019

Alert Code 3: Pile 3 web at south abutment is rusted through. - 6/24/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-113-32.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Major Collector
04 City	LIBERTY GROVE TOWNSH	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03934 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST OF MANTADOR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	12.997	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 00' 40.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	653535.0 5114578.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	4 Load Testing
108 Wearing Surface	6 Bituminous	64 Oper. Rating	HS 44 80 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 26 48 Tons
208 Dk Overburden	302 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1972 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	220 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 06, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.2 Ft.	Underwater	N
48 Length of Max Span	50 Ft.	Other Special	N
49 Structure Length	53.15 Ft.	218 Channel Profile	1 48 06/24/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	30.5 Ft.	212 Structure Load Rated	02/15/2017
52 Deck Width	32.5 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen, Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 39-113-32.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,722	95	1,636	5	86	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	86	0	0	100	86	0	0	0	0
510/1:Wearing Surfaces	sq.ft	1,722	95	1,636	5	86	0	0	0	0
3220/1:Crack (Wearing Surface)	sq.ft	86	0	0	100	86	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	213	0	0	100	213	0	0	0	0
1000/1:Corrosion	ft	213	0	0	100	213	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	85	85	10	10	5	5	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co	sq.ft	15	0	0	67	10	33	5	0	0
215/3:Re Conc Abutment	ft	66	96	63	5	3	0	0	0	0
1130/3:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
330/1:Metal Bridge Railing	ft	105	83	87	17	18	0	0	0	0
1900/1:Distortion	ft	18	0	0	100	18	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	105	93	98	7	7	0	0	0	0
1130/1:Cracking (RC and Other)	ft	7	0	0	100	7	0	0	0	0
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B&A end markers on all 4 corners. Vert. curve - East. Vert- & horiz. curve - west. Old timber piling in channel. Abutment footings are exposed partially. Moderate erosion in front of both abutments & wingwalls. New HBP 2014.

Alert Code 1: Light to moderate girder rust. Minor to moderate scour under structure.

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SEC 409

Structure Number: 39-115-33.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	66.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	BELFORD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF MANTADOR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 09' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 58' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	655980.4 5113405.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 14 26 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 9 18 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	201 Gravel/Dirt	209 Posted in "Tons"	18 Tons
Age and Service		Appraisal	
27 Yr Built	1978	67 Structural Condition	5 Above Min Tolerable
106 Yr Reconstructed	-1	68 Deck Geometry	5 Above Tolerable
42 Type of Service	1 Highway - On	69 Underclear. Vert & Horiz	N Not applicable (NBI)
	5 Waterway - Under	71 Waterway Adequacy	7 Above Minimum
28 Lanes on Structure	2	72 App. Rdwy. Alignment	6 Equal Min Criteria
29 ADT	20 30 Year of ADT	36 Traffic Safety Features	1 1 1 1
109 Average Daily Truck Traffic	-1.00	113 Scour Critical	U Unknown Scour
19 Bypass, Detour Length	4 Miles		
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 07, 2018
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	20.7 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 06/24/2019
49 Structure Length	48.88 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	20.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 39-115-33.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,098	0	0	100	1,098	0	0	0	0
1180/1:Abrasion	sq.ft	1,098	0	0	100	1,098	0	0	0	0
111/1:Timber Open Girder	ft	390	0	0	97	380	3	10	0	0
1150/1:Check/Shake	ft	380	0	0	100	380	0	0	0	0
1170/1:Split/Delamination (Timber)	ft	10	0	0	0	0	100	10	0	0
202/3:Steel Column	each	18	0	0	0	0	100	18	0	0
1000/3:Corrosion	each	9	0	0	0	0	100	9	0	0
7363/3:Steel Section Loss	each	9	0	0	0	0	100	9	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
206/3:Timber Column	each	6	0	0	83	5	17	1	0	0
1170/3:Split/Delamination (Timber)	each	6	0	0	83	5	17	1	0	0
216/3:Timber Abutment	ft	49	53	26	47	23	0	0	0	0
1150/3:Check/Shake	ft	23	0	0	100	23	0	0	0	0
231/1:Steel Pier Cap	ft	46	0	0	100	46	0	0	0	0
1000/1:Corrosion	ft	46	0	0	100	46	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
235/1:Timber Pier Cap	ft	23	0	0	100	23	0	0	0	0
1150/1:Check/Shake	ft	17	0	0	100	17	0	0	0	0
1170/1:Split/Delamination (Timber)	ft	6	0	0	100	6	0	0	0	0
332/1:Timb Bridge Railing	ft	98	59	58	41	40	0	0	0	0
1140/1:Decay/Section Loss	ft	40	0	0	100	40	0	0	0	0
7363/3:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
8398/3:Slope Protection	each	2	0	0	0	0	100	2	0	0
2210/3:Movement	each	2	0	0	0	0	100	2	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: End markers on approach corners. Horizontal curve on south, vertical and horizontal on north side. Signed "curve" & "25 mph" south only. Minor channel debris. Minor embankment erosion. SE, SW & NE corners of curb are damaged. Posted for 18 tons. 11/2018 north and south posting signs are illegible. South sign is riddled with bullet holes. Posted 4/23/19 per LG nmh

Alert Code 1: 11/18: Weight limit signs are not legible. Moderate piling rust w/ section loss at waterline. Timber pier piling have minor damage, north is split. Abutment riprap has washed out. Pier is leaning south, measurements in 2' on N side of pile: Pile 1 Pile 3 ??? 3/4" 1/2" 11/14 3/4" 1 1/4"

Alert Code 2: North 2 girders are tipped south and are tied to the cap with cable.

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SEC 409

Structure Number: 39-116-34.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Applicable	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	BELFORD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 SOUTH MANTADOR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 08' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 56' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	658445.9 5111912.7	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	3		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 20 36 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 20 36 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	9 Above Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	November 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	137.50 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.0 Ft.	213 Federal Aid Project Number	BRO-0039(046)
52 Deck Width	30.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-116-34.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	4,200	100	4,200	0	0	0	0	0	0
Notes:New in 2019 . - 11/7/2019										
520/2:Conc Re Prot Sys	sq.ft	4,200	100	4,200	0	0	0	0	0	0
Notes:New in 2019 . - 11/7/2019										
104/1:Pre Clsd Box Girder	ft	538	100	538	0	0	0	0	0	0
Notes:New in 2019 . - 11/7/2019										
210/1:Re Conc Pier Wall	ft	60	100	60	0	0	0	0	0	0
Notes:New in 2019. - 11/7/2019										
215/1:Re Conc Abutment	ft	60	100	60	0	0	0	0	0	0
Notes:New in 2019. - 11/7/2019										
330/1:Metal Bridge Railing	ft	280	100	280	0	0	0	0	0	0
Notes:New in 2019 . - 11/7/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:New in 2019. - 11/7/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0
Notes:New in 2019 . - 11/7/2019										

Remarks: _ - 11/7/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-117-34.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	BELFORD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 2 SOUTH MANTADOR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 08' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 56' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	659330.0 5111499.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 23 43 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1995 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	85 Ft.	Other Special	N
49 Structure Length	85.96 Ft.	218 Channel Profile	1 48 06/24/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.5 Ft.	213 Federal Aid Project Number	BRO-39(19) SITE 1
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 39-117-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,659	96	2,556	4	103	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	2,659	100	2,656	0	3	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	100	0	0	100	100	0	0	0	0
104/1:Pre Clsd Box Girder	ft	344	100	344	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	62	95	59	5	3	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	3	0	0	100	3	0	0	0	0
1130/2:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
330/1:Metal Bridge Railing	ft	171	100	171	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/3:Settlement	each	2	0	0	100	2	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Horizontal curve - west, vertical curve - east. Embankment in SE quadrant is sliding. Signed for "Curve" & "50 mph" both directions. minor erosion behind wingwalls , boths abutment have undermines , minor abrasion on deck , NW guardrail has traffic impacted. under structure debris has blocking cross the channel

Alert Code 1: South edge deck is cracking along outside edges where rail posts # 1 /3 & 4 are bolted to the deck.

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SEC 409

Structure Number: 39-118-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	BELFORD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH HANKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 07' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 54' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	661674.1 5110740.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	3	tion modified to be greater than the standard HL 93 design live load)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 21 39 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2012 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	November 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	134.00 Ft.	218 Channel Profile	1 48 06/22/2017
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.0 Ft.	212 Structure Load Rated	12/05/2012
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	BRO-0039(039)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-118-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,087	100	4,087	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	4,087	100	4,087	0	0	0	0	0	0
3230/1:Effectiveness (Wearing Surface)	sq.ft	4,087	100	4,087	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	536	100	536	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	61	100	61	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	61	100	61	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	269	100	269	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
2210/3:Movement	each	2	0	0	100	2	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Electric fence attached to SW rail posts. Rip rap sliding against the piers.

Alert Code 1: Minor deck abrasion.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-119-35.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Major Collector
04 City	BELFORD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03917 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH OF HANKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 07' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 53' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	663287.3 5110540.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	4 Load Testing
107 Deck Struct Type	5 Steel Plate	64 Oper. Rating	HS 26 46 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 15 28 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	307 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1948 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	725 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	16.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	5 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 07, 2018
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	44 Ft.	218 Channel Profile	1 48 06/25/2019
49 Structure Length	46.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	02/16/2017
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 39-119-35.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
30/1:Steel Deck - Orthotropic	sq.ft	1,313	100	1,313	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	1,313	100	1,313	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	705	75	529	25	176	0	0	0	0
1000/1:Corrosion	ft	176	0	0	25	176	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	25	25	50	50	25	25	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	25	25	50	50	25	25	0	0
215/3:Re Conc Abutment	ft	69	81	56	19	13	0	0	0	0
1130/3:Cracking (RC and Other)	ft	13	0	0	100	13	0	0	0	0
330/1:Metal Bridge Railing	ft	95	100	95	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/2:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B&A end markers all 4 corners. HBP overlay & railing in 2016.

Alert Code 1: Steel girders have light rust. Minor cracking & deterioration in concrete abutments. Moderate embankment erosion - SE quadrant.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-121-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	36.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	RANDENBURG TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 1 SOUTH GREAT BEND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 08' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 50' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	666396.7 5111445.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 14 26 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 9 18 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	03 Tons
Age and Service		Appraisal	
27 Yr Built	1920 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 20, 2019
32 Approach Roadway Width	13 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	Y 24 06/20/2019
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.4 Ft.	Other Special	N
48 Length of Max Span	70 Ft.	218 Channel Profile	1 48 06/25/2019
49 Structure Length	71.85 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-121-35.0

Structure Number: 39-121-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,335	0	0	100	1,335	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	668	0	0	100	668	0	0	0	0
Notes:Deck has varying degrees of decay. - 6/20/2019										
1180/1:Abrasion	sq.ft	667	0	0	100	667	0	0	0	0
Notes:Deck has 3in of gravel overburden - 6/20/2019										
113/1:Steel Stringer	ft	433	0	0	100	433	0	0	0	0
1000/1:Corrosion	ft	433	0	0	100	433	0	0	0	0
Notes:Steel stringers have rust - 6/20/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/20/2019										
120/1:Steel Truss	ft	144	0	0	100	144	0	0	0	0
1000/1:Corrosion	ft	142	0	0	100	142	0	0	0	0
Notes:Steel truss has rust throughout the structure - 6/20/2019										
1900/1:Distortion	ft	2	0	0	100	2	0	0	0	0
Notes:Impact damage to north end post of east truss. Trusses are no longer parallel: 20.4' out to out at top of south end and 20.7' out to out at top of north end, and north end of west truss is tipping down. - 6/20/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/20/2019										
152/1:Steel Floor Beam	ft	75	0	0	100	75	0	0	0	0
1000/1:Corrosion	ft	38	0	0	100	38	0	0	0	0
Notes:Steel floor beams have rust - 6/20/2019										
1900/1:Distortion	ft	37	0	0	100	37	0	0	0	0
Notes:Floor beams 1 and 2 are bowed - 6/20/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/20/2019										
162/1:Stl Gus Plate	each	44	0	0	100	44	0	0	0	0
1000/1:Corrosion	each	44	0	0	100	44	0	0	0	0
Notes:Steel gusset plates have rust - 6/20/2019										
202/2:Steel Column	each	10	0	0	50	5	0	0	50	5
1000/2:Corrosion	each	5	0	0	100	5	0	0	0	0
Notes:Steel columns have rust - 6/20/2019										
4000/2:Settlement	each	5	0	0	0	0	0	0	100	5
Notes:West end of north abutment has settled. - 6/20/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/20/2019										
216/2:Timber Abutment	ft	46	0	0	0	0	50	23	50	23

Structure Number: 39-121-35.0

4000/2:Settlement	ft	23	0	0	0	0	0	0	100	23
Notes:West end of north abutment has settled. Trusses are no longer parallel: 20.4' out to out at top of south end and 20.7' out to out at top of north end, and north end of west truss is tipping down. - 6/20/2019										
6000/2:Scour	ft	23	0	0	0	0	0	100	23	0
Notes:Moderate abutment scour, exposing bottom of both backwalls. - 6/20/2019										
231/1:Steel Pier Cap	ft	43	0	0	0	0	0	100	43	0
1000/1:Corrosion	ft	21	0	0	0	0	0	100	21	0
Notes:Steel pier cap has rust - 6/20/2019										
1900/1:Distortion	ft	22	0	0	0	0	0	100	22	0
Notes:Both caps are bowed. - 6/20/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/20/2019										
330/1:Metal Bridge Railing	ft	144	0	0	100	144	0	0	0	0
1000/1:Corrosion	ft	144	0	0	100	144	0	0	0	0
Notes:Metal bridge rail has rust - 6/20/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/20/2019										
332/1:Timb Bridge Railing	ft	144	100	144	0	0	0	0	0	0
6000/3:Scour	each	1	0	0	0	0	0	0	100	1
Notes:Moderate abutment scour, exposing bottom of both backwalls. - 6/20/2019										
7357/1:Pack Rust	each	1	100	1	0	0	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	0	0	100	1	0	0	0	0
Notes:Impact damage to north end post of east truss. - 6/20/2019										
7363/1:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Crack arrested weld over bent cap 1 at south abutment. - 6/20/2019										
8401/2:Wings	each	4	75	3	0	0	25	1	0	0
4000/2:Settlement	each	1	0	0	0	0	100	1	0	0
Notes:West wing wall has settlement - 6/20/2019										

Remarks: Deck has tread planks. SE abutment backwall has been filled with rock. Posted for 3 tons. B&A end markers on all corners. West and South West channels have major erosion. Crack arrested weld over bent cap 1 at south abutment. 2017: Timber rails have been replaced. North abutment has washed out and south abutment is starting to washout, unable to get under structure for safety reasons 6/20/19 - 6/20/2019 Large hole 9' deep by 20' wide on north side of structure. Bridge closed 6-20-19 - 6/20/2019 movd from Critical Finding cta.

Alert Code 1: Deck has varying degrees of decay. Both caps are bowed. Sway brace #3 east is bent. - 6/20/2019

Alert Code 2: Floor beams 1 and 2 are bowed. Most of the east floor beam hangers are loose. Moderate abutment scour, exposing bottom of both backwalls. Impact damage to north end post of east truss. - 6/20/2019

Alert Code 3: West end of north abutment has settled. Trusses are no longer parallel: 20.4' out to out at top of south end and 20.7' out to out at top of north end, and north end of west truss is tipping down. Called L. Bladow-Richland County about the settlement on 11/7/2018. - 6/20/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-123-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	36.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	EAGLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 2 NORTH COLFAX	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 30' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 47' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	668813.7 5152313.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	3 Serious
Structure Type and Material		60 Substructure	2 Critical
43 Main Struct Type	Steel continuous	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 13 23 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 7 14 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	0 Tons
Age and Service		Appraisal	
27 Yr Built	1956 106 Yr Reconstructed	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 25, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	Y 96 11/17/2016
48 Length of Max Span	48 Ft.	218 Channel Profile	1 48 06/19/2019
49 Structure Length	141.08 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/03/2017
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-123-09.0

Structure Number: 39-123-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,520	0	0	89	3,119	11	401	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	450	0	0	78	350	22	100	0	0
Notes:Random deck cracking, spalling, unconsolidated concrete and breaking off of shear connectors of west girder, span 3 - 6/25/2019										
1120/1:Efflorescence/Rust Staining	sq.ft	150	0	0	100	150	0	0	0	0
Notes:Random deck cracking, spalling, unconsolidated concrete and breaking off of shear connectors of west girder, span 3 - 6/25/2019										
1130/1:Cracking (RC and Other)	sq.ft	301	0	0	0	0	100	301	0	0
Notes:Random deck cracking, spalling, unconsolidated concrete and breaking off of shear connectors of west girder, span 3 - 6/25/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	2,619	0	0	100	2,619	0	0	0	0
Notes:Deck has minor to moderate abrasion - 6/25/2019										
107/1:Steel Opn Girder/Beam	ft	564	0	0	75	423	25	141	0	0
1000/1:Corrosion	ft	564	0	0	75	423	25	141	0	0
Notes:Steel girders are rusty - 6/25/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/25/2019										
161/1:Stl Pin Pin/Han both	each	8	0	0	100	8	0	0	0	0
1000/1:Corrosion	each	8	0	0	100	8	0	0	0	0
Notes:Pin and hanger assembly and girders are rusty - 6/25/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has completely failed - 6/25/2019										
205/3:Re Conc Column	each	4	0	0	75	3	25	1	0	0
1080/3:Delamination/Spall/Patched Area	each	3	0	0	100	3	0	0	0	0
Notes:SW column pier 2 has spalling w/ exposed rebar. - 6/25/2019										
1090/3:Exposed Rebar	each	1	0	0	0	0	100	1	0	0
Notes:SW column pier 2 has spalling w/ exposed rebar. - 6/25/2019										
210/1:Re Conc Pier Wall	ft	0	0	0	0	0	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	0	0	0	0	0	0	0	0	0
Notes:SW column pier 2 has spalling w/ exposed rebar. - 6/25/2019										
215/2:Re Conc Abutment	ft	52	0	0	8	4	42	22	50	26
1080/2:Delamination/Spall/Patched Area	ft	18	0	0	0	0	50	9	50	9
Notes:North abutment beam seats 1 and 4 are severely deteriorated, no bearing at west beam #1. East end of north abutment is settling. - 6/25/2019										
1090/2:Exposed Rebar	ft	4	0	0	0	0	0	0	100	4
Notes:North abutment beam seats 1 and 4 are severely deteriorated, no bearing at west beam #1. East end of north abutment is settling. - 6/25/2019										
1130/2:Cracking (RC and Other)	ft	17	0	0	24	4	77	13	0	0
Notes:North abutment beam seats 1 and 4 are severely deteriorated, no bearing at west beam #1. - 6/25/2019										
4000/2:Settlement	ft	13	0	0	0	0	0	0	100	13

Structure Number: 39-123-09.0

Notes: East end of north abutment is settling. - 6/25/2019

234/1: Re Conc Pier Cap	ft	46	100	46	0	0	0	0	0	0
1080/1: Delamination/Spall/Patched Area	ft	46	0	0	100	40	15	6	0	0
313/1: Fixed Bearing	each	16	0	0	75	12	25	4	0	0
2210/1: Movement	each	15	0	0	80	12	20	3	0	0

Notes: North abutment beam seats 1 and 4 are severely deteriorated, no bearing at west beam #1. East end of north abutment is settling. - 6/25/2019

2240/1: Loss of Bearing Area	each	1	0	0	0	0	100	1	0	0

Notes: North abutment beam seats 1 and 4 are severely deteriorated, no bearing at west beam #1. East end of north abutment is settling. - 6/25/2019

515/1: Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1: Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100

Notes: Steel protective coating has failed - 6/25/2019

330/1: Metal Bridge Railing	ft	282	0	0	50	141	25	70	25	71
1020/1: Connection	ft	282	0	0	50	141	25	70	25	71

Notes: Railing leaning and connections are broken due to impact damage. - 6/25/2019

515/1: Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1: Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100

Notes: Steel protective coating has failed - 6/25/2019

7000/1: Damage	sq.ft	100	0	0	0	0	100	100	0	0
331/1: Re Conc Bridge Railing	ft	282	90	254	10	28	0	0	0	0
1080/1: Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0

Notes: minor random spalls throughout concrete curb - 6/25/2019

1130/1: Cracking (RC and Other)	ft	18	0	0	100	18	0	0	0	0

Notes: 18 cracks counted in concrete curb - 6/25/2019

4000/1: Settlement	each	1	0	0	100	1	0	0	0	0

Notes: East end of north abutment is settling. - 6/25/2019

7362/1: Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
8401/1: Wings	each	4	0	0	0	0	100	4	0	0
4000/1: Settlement	each	2	0	0	0	0	100	2	0	0

Notes: East end of north abutment is settling. - 6/25/2019

7000/1: Damage	each	2	0	0	0	0	100	2	0	0

Notes: North abutment beam seats 1 and 4 are severely deteriorated, no bearing at west beam #1. East end of north abutment is settling. - 6/25/2019

Remarks: Posted for 3 ton both directions, yellow markers on south. Contacted Lowell Bladlow about deteriorating condition of north backwall. 11-13-2012 - AECOM UT Pin Inspection Span #3 & Span #2 (joint # 2) is out of alignment: 8-0" separation west, / East edge has 1-0" separated Steel railing has damaged by traffic impacted (10 rail post has lost connected), erosion behind NE wingwall and hole at the deck nosing. - 6/25/2019

Alert Code 1: Random deck cracking, spalling, unconsolidated concrete and breaking off of shear connectors of west girder, span 3. Soffit efflorescence visible. SW column pier 2 has spalling w/ exposed rebar. Railing leaning and connections are broken due to impact damage. - 6/25/2019

Alert Code 2: Most abut. anchor bolts are bent, north abutment, west girder has one bolt broke free. Pin and hanger assembly and girders are rusty. Abut 4 beams seat 2 has moderate deterioration. N abut settling 1" down to E and tipping 1" out 11/14. - 6/25/2019

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SEC 409

Structure Number: 39-123-09.0

Alert Code 3: North abutment beam seats 1 and 4 are severely deteriorated, no bearing at west beam #1. East end of north abutment is settling. Span 3 is twisting - measurements are on the top of west and east curbs: W-5 1/2" E-3/4" 8/07: W-6", E-1". 2008: W-6 3/4", E-____ 11/09: W-6 1/2", E-____ 11/18: w-8 1/4", E-3/4" 11/10; W-6 1/2", E-3/4" 10/11; W- 6 1/2", E-7/8" 10/12; W- 7", E-3/4" 9/13; W- 7", E-3/4" 11/14: W-7 1/2", E-1/2" - 6/25/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-123-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	26.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	IBSEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ANTELOPE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 3 WEST DWIGHT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 16' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 48' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	668655.8 5127757.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 7 13 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 3 7 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	03 Tons
Age and Service		Appraisal	
27 Yr Built	1920 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 21, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 06/21/2019
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.7 Ft.	Other Special	N
48 Length of Max Span	32 Ft.	218 Channel Profile	1 48 05/02/2019
49 Structure Length	34.12 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-123-24.0

Structure Number: 39-123-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	614	0	0	100	614	0	0	0	0
1180/1:Abrasion	sq.ft	614	0	0	100	614	0	0	0	0
Notes:Deck has abrasion throughout. - 6/21/2019										
113/1:Steel Stringer	ft	443	0	0	89	392	12	51	0	0
1000/1:Corrosion	ft	392	0	0	100	392	0	0	0	0
Notes:Steel elements have rust - 6/21/2019										
1900/1:Distortion	ft	51	0	0	0	0	100	51	0	0
Notes:Stringers 5, 9, & 10 in Panel 1 and Stringer 7 in Panel 2 are bent. - 6/21/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/21/2019										
120/1:Steel Truss	ft	69	0	0	0	0	75	52	25	17
1000/1:Corrosion	ft	38	0	0	0	0	100	38	0	0
Notes:Steel truss members have rust - 6/21/2019										
1010/1:Cracking	ft	2	0	0	0	0	100	2	0	0
Notes:Splice plate at upper chord/NE & SW end posts are cracked. - 6/21/2019										
1900/1:Distortion	ft	17	0	0	0	0	0	0	100	17
Notes:South lower chord in west panel is twisted. - 6/21/2019										
7357/1:Pack Rust	ft	12	0	0	0	0	100	12	0	0
Notes:Moderate pack rust at lower panel points. - 6/21/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed. - 6/21/2019										
152/1:Steel Floor Beam	ft	16	0	0	0	0	100	16	0	0
1900/1:Distortion	ft	16	0	0	0	0	100	16	0	0
Notes:Steel floor beams are bowed - 6/21/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/21/2019										
162/1:Stl Gus Plate	each	20	0	0	60	12	40	8	0	0
1000/1:Corrosion	each	12	0	0	100	12	0	0	0	0
Notes:Steel gusset plates have rust - 6/21/2019										
7357/1:Pack Rust	each	8	0	0	0	0	100	8	0	0
Notes:Steel gusset plates have pack rust. - 6/21/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/21/2019										
202/3:Steel Column	each	10	0	0	0	0	100	10	0	0
1000/3:Corrosion	each	10	0	0	0	0	100	10	0	0

Structure Number: 39-123-24.0

Notes: Steel columns have rust - 6/21/2019

515/3: Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/3: Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100

Notes: Steel protective coating has failed - 6/21/2019

216/3: Timber Abutment	ft	39	0	0	100	39	0	0	0	0
1900/3: Distortion	ft	39	0	0	100	39	0	0	0	0

Notes: Both abutments are bowed. - 6/21/2019

231/1: Steel Pier Cap	ft	36	0	0	0	0	97	35	3	1
1010/1: Cracking	ft	1	0	0	0	0	0	0	100	1

Notes: West cap is cracked at center stringer. - 6/21/2019

1900/1: Distortion	ft	35	0	0	0	0	100	35	0	0

Notes: Steel pier cap is bowing along with the abutment. - 6/21/2019

515/1: Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1: Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100

Notes: Steel protective coating has failed. - 6/21/2019

313/1: Fixed Bearing	each	4	0	0	100	4	0	0	0	0
1000/1: Corrosion	each	4	0	0	100	4	0	0	0	0

Notes: Fixed bearings are rusting. - 6/21/2019

515/1: Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1: Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100

Notes: Steel protective coating has failed - 6/21/2019

330/1: Metal Bridge Railing	ft	69	0	0	0	0	100	69	0	0
1000/1: Corrosion	ft	65	0	0	0	0	100	65	0	0

Notes: Metal bridge rail has rust - 6/21/2019

7000/1: Damage	ft	4	0	0	0	0	100	4	0	0

Notes: NW corner of rail is damaged - 6/21/2019

515/1: Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1: Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100

Notes: Steel protective coating has failed - 6/21/2019

332/1: Timb Bridge Railing	ft	69	0	0	75	52	0	0	25	17
1140/1: Decay/Section Loss	ft	17	0	0	0	0	0	0	100	17

Notes: NE section of timber curb is gone. - 6/21/2019

1160/1: Crack (Timber)	ft	52	0	0	100	52	0	0	0	0

Notes: The remainder of timber curb has cracking throughout. - 6/21/2019

6000/3: Scour	each	1	100	1	0	0	0	0	0	0
7357/1: Pack Rust	each	1	0	0	0	0	100	1	0	0

Notes: Moderate pack rust at lower panel points. - 6/21/2019

8401/3: Wings	each	4	75	3	25	1	0	0	0	0
1900/3: Distortion	each	1	0	0	100	1	0	0	0	0

Notes: SE wing wall is bowed - 6/21/2019

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6000/3:Scour	each	1	100	1	0	0	0	0	0	0

Remarks: Deck has tread planks. B&A markers at NE, NW, SW corners. Vertical curve - east. - 6/21/2019

Alert Code 1: Varying degrees of timber deterioration throughout. Major erosion at SE corner, and moderate erosion at NW corner. Minor erosion behind wingwalls - NE is tipping. Bridge curbs are decayed - 1/2 of north curb is missing. Deck ties to lower chords are loose. - 6/21/2019

Alert Code 2: Caps are bent & floor beam is bowed. U2-L1 & U3-L1 Rt are bent. Stringers 5, 9, & 10 in Panel 1 and Stringer 7 in Panel 2 are bent. Moderate pack rust at lower panel points. Abutments are bowed outward. Splice plate at upper chord/NE & SW end posts are cracked. - 6/21/2019

Alert Code 3: West cap is cracked at center stringer. South lower chord in west panel is twisted. - 6/21/2019

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Structure Number: 39-123-24.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ANTELOPE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2.2 EAST OF I-29 INT.	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 16' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 48' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	668315.8 5127749.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1998 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	November 15, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	8.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X10X60' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Structure Number: 39-123-24.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	121	83	100	17	21	0	0	0	0
1130/3:Cracking (RC and Other)	ft	21	0	0	100	21	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: Minor vertical curves both directions. Low traffic , SE wingwall has a growing tree

Alert Code 1: Minor scour at south end of south rip rap & north end of box. Minor bank sliding at SE of box & debris hung
-up on S. end .Minor misalignment of sections.

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Structure Number: 39-123-34.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	GREAT BEND CITY	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	CITY OF GREAT BEND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 09' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 48' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	669597.6 5113153.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 32 58 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 19 35 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	190 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	January 17, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	45.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	1 48 06/25/2019
49 Structure Length	75.13 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	02/16/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 39-123-34.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,024	95	1,923	5	101	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	823	0	0	71	585	29	238	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
210/3:Re Conc Pier Wall	ft	39	87	34	8	3	5	2	0	0
215/3:Re Conc Abutment	ft	82	89	73	11	9	0	0	0	0
304/1:Open Expansion Joint	ft	39	0	0	54	21	0	0	46	18
313/3:Fixed Bearing	each	11	0	0	100	11	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
331/1:Re Conc Bridge Railing	ft	151	82	123	16	24	2	3	1	1
1090/1:Exposed Rebar	ft	3	0	0	0	0	100	3	0	0
1130/1:Cracking (RC and Other)	ft	24	0	0	100	24	0	0	0	0
7000/1:Damage	ft	1	0	0	0	0	0	0	100	1
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Double B&A end markers on approach corners. Minor channel debris. Old pile under north span in channel. East end of pier broken at water line??

Alert Code 1: Deck has minor, random cracking - some soffit efflorescence visible. Girders have light to moderate rust. Minor scour under structure. West 1/2 of armor plate over pier joint is missing. Minor cracks in abutments. Erosion at ne, se & sw wing walls. East rail at post #5 & 6 have spalls with exposed rebar.

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SEC 409

Structure Number: 39-124-15.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	26.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	BERCROMBIE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2WEST 2SOUTH ABERCROMBIE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 25' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 46' 40.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	670767.0 5142968.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 5 9 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 3 7 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	201 Gravel/Dirt	209 Posted in "Tons"	04 Tons
Age and Service		Appraisal	
27 Yr Built	1926 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	20 30 Year of ADT 2018	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 13, 2018
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 11/13/2018
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.4 Ft.	Other Special	N
48 Length of Max Span	74 Ft.	218 Channel Profile	1 48 06/19/2019
49 Structure Length	77.10 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 39-124-15.1

Structure Number: 39-124-15.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,421	0	0	100	1,421	0	0	0	0
1180/1:Abrasion	sq.ft	1,421	0	0	100	1,421	0	0	0	0
113/1:Steel Stringer	ft	692	0	0	100	692	0	0	0	0
1000/1:Corrosion	ft	692	0	0	100	692	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
120/1:Steel Truss	ft	154	0	0	97	150	3	4	0	0
1000/1:Corrosion	ft	140	0	0	93	140	0	0	0	0
1900/1:Distortion	ft	14	0	0	250	10	100	4	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
152/1:Steel Floor Beam	ft	75	0	0	100	75	0	0	0	0
1000/1:Corrosion	ft	75	0	0	100	75	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
162/1:Stl Gus Plate	each	44	0	0	77	34	23	10	0	0
1000/1:Corrosion	each	44	0	0	77	34	23	10	0	0
7357/1:Pack Rust	each	10	0	0	0	0	100	10	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
202/3:Steel Column	each	15	0	0	33	5	53	8	13	2
1000/3:Corrosion	each	14	0	0	36	5	57	8	7	1
7363/3:Steel Section Loss	each	2	0	0	0	0	0	0	100	2
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
216/3:Timber Abutment	ft	36	0	0	100	36	0	0	0	0
1180/3:Abrasion	ft	36	0	0	100	36	0	0	0	0
231/1:Steel Pier Cap	ft	36	0	0	0	0	100	36	0	0
1900/1:Distortion	ft	36	0	0	0	0	100	36	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
313/1:Fixed Bearing	each	4	0	0	100	4	0	0	0	0
1000/1:Corrosion	each	8	50	4	50	4	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
330/1:Metal Bridge Railing	ft	154	0	0	0	0	100	154	0	0
1900/1:Distortion	ft	154	0	0	0	0	100	154	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100

Structure Number: 39-124-15.1

3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
332/1:Timb Bridge Railing	ft	154	0	0	100	154	0	0	0	0
1160/1:Crack (Timber)	ft	154	0	0	100	154	0	0	0	0
4000/3:Settlement	each	1	100	1	0	0	0	0	0	0
7357/1:Pack Rust	each	1	0	0	100	1	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
7363/3:Steel Section Loss	each	1	100	1	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B&A end markers at NW & SW corners. Posted for 4 tons. Vertical curve - north. Horizontal curve - south.
1/10/2018: Emailed L. Bladow-Richland County pictures of the corroded abutment pile. He stated that he will monitor this structure.

Alert Code 1: Deck planks have moderate wear. Heavy embankment erosion - SW quadrant. Both metal rails have traffic impact damage. Minor flood debris hung up in superstructure.

Alert Code 2: The web of the north pile in the SE wingwall is rusted through. Bent or damaged members: U1-L1, lower chord L1-L2, U7-L7, U7-L8, U8-L8 Lt; U1-L1, L2-U3, L3-U3, U4-L5, U7-L7, U8-L8, lower chord L9-L10, both end posts Rt. Pack rust forming at lower gusset plate connections.

Alert Code 3: South abutment piling have heavy rust at ground level with section loss present, and the webs of Pile #'s 9 & 10 are rusted through. Both abutment caps are distorted. The south cap is cracked at bolt holes below Beam #'s 3 & 5, and the north cap is cracked at bolt holes below Beam #'s 3 & 4.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-125-17.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	BERCROMBIE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03918 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TRIB TO ANTELOPE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST OF GALCHUTT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 23' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 45' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	671828.7 5139138.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1999 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	400 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	8.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	November 13, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.8 Ft.	Underwater	N
48 Length of Max Span	16 Ft.	Other Special	N
49 Structure Length	33.14 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRC-3918(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14X14X76' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 39-125-17.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	151	89	135	8	12	3	4	0	0
1080/3:Delamination/Spall/Patched Area	ft	4	0	0	0	0	100	4	0	0
1090/3:Exposed Rebar	ft	4	0	0	0	0	100	4	0	0
1900/3:Distortion	ft	12	0	0	100	12	0	0	0	0
8398/3:Slope Protection	each	4	100	4	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Patched area on center wall in east barrel. End markers all 4 corners. There are plates behind joints. Minor scour at SE wingwall. Silt accumulations at north end of barrels and in channel. Core holes in floor.

Alert Code 1: Variable joint openings & misalignment up to = 2 1/4".

Alert Code 2: Spall with exposed rebar at outside wall of the west barrel & roof of the NW barrel.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-125-33.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Major Collector
04 City	RANDENBURG TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03934 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST OF GREAT BEND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	24.095	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 09' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 46' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	671550.7 5113415.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 41 74 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	306 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	360 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	14.00	36 Traffic Safety Features	1 1 1 1
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 19, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	15.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.9 Ft.	Other Special	N
48 Length of Max Span	59 Ft.	218 Channel Profile	1 48 06/25/2019
49 Structure Length	62.01 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	28.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	31.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 39-125-33.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,798	95	1,708	5	90	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	90	0	0	100	90	0	0	0	0
104/1:Pre Clsd Box Girder	ft	620	98	608	2	12	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	8	0	0	100	8	0	0	0	0
1090/1:Exposed Rebar	ft	4	0	0	100	4	0	0	0	0
202/3:Steel Column	each	4	0	0	0	0	100	4	0	0
1000/3:Corrosion	each	4	0	0	0	0	100	4	0	0
215/3:Re Conc Abutment	ft	62	50	31	39	24	11	7	0	0
1080/3:Delamination/Spall/Patched Area	ft	16	0	0	100	16	0	0	0	0
1130/3:Cracking (RC and Other)	ft	15	0	0	53	8	47	7	0	0
321/1:Re Conc Approach Slab	sq.ft	682	50	341	50	341	0	0	0	0
4000/1:Settlement	sq.ft	341	0	0	100	341	0	0	0	0
330/1:Metal Bridge Railing	ft	124	100	124	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
6000/2:Scour	each	1	0	0	100	1	0	0	0	0

Remarks: E abut spalling by tube pile. Some moisture seepage between box girder joints. Nw wingwall has a minor separation of a construction joint. New 10" concrete deck 2005.

Alert Code 1: Concrete cracking throughout substructure. East abutment has spalling beside steel column. NW wingwall is separated at joint and is tipping. Scour behind the NW wingwall. West approach slab has settled.

Alert Code 2: Moderate scour under west side of structure.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-126-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	SUMMIT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 3 NORTH GREAT BEND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 11' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 44' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	673705.4 5118311.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	3		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	4 Low Slump Concrete	64 Oper. Rating	HS 39 71 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2014 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	November 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	82 Ft.	Other Special	N
49 Structure Length	218.00 Ft.	218 Channel Profile	1 06/25/2019
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/19/2014
	28.0 Ft.	213 Federal Aid Project Number	BRO-0039(041)
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 39-126-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	6,698	99	6,651	1	47	0	0	0	0
1190/3:Abrasion(PSC/RC)	sq.ft	47	0	0	100	47	0	0	0	0
520/3:Conc Re Prot Sys	sq.ft	6,649	100	6,649	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	872	100	872	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	70	100	70	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	74	100	74	0	0	0	0	0	0
310/1:Elastomeric Bearing	each	24	100	24	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	436	100	436	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Alert Code 1: Minor deck abrasion.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-126-31.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	SUMMIT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 2 NORTH GREAT BEND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 11' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 44' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	674284.8 5117041.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 25 46 Tons
208 Dk Overburden	200 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	525 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 1 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	49 Ft.	Other Special	N
49 Structure Length	104.00 Ft.	218 Channel Profile	1 48 06/25/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	CER-3925(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 39-126-31.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,486	91	3,160	9	326	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	26	0	0	100	26	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	300	0	0	100	300	0	0	0	0
104/1:Pre Clsd Box Girder	ft	417	0	0	88	367	12	50	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
1110/1:Cracking (PSC)	ft	415	0	0	88	365	12	50	0	0
210/3:Re Conc Pier Wall	ft	33	79	26	21	7	0	0	0	0
1130/3:Cracking (RC and Other)	ft	7	0	0	100	7	0	0	0	0
215/2:Re Conc Abutment	ft	66	67	44	33	22	0	0	0	0
1130/2:Cracking (RC and Other)	ft	8	0	0	100	8	0	0	0	0
6000/2:Scour	ft	14	0	0	100	14	0	0	0	0
331/1:Re Conc Bridge Railing	ft	207	92	190	8	17	0	0	0	0
1130/1:Cracking (RC and Other)	ft	17	0	0	100	17	0	0	0	0
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 2/2017: Reduced random girder cracking from Code 3 to Code 2 after talking with Bridge Division since the cracking is not getting any worse. Guardrail on approach corners only, which is low & rub rail has fallen off on NW corner. B&A end markers at all corners. Rip rap added at SW corner. Rust stains visible along the west edge of the deck.

Alert Code 1: Random deck cracking, some soffit efflorescence is visible. South abutment is undermined, piling is exposed. Heavy debris hung up under structure. Minor spalling in south abutment beneath Beam #'s 1&2. SW bank is eroding.

Alert Code 2: All girders have hairline longitudinal cracks 3" to 5" from the bottom, entire length of beam and on both sides. All beam ends at both abuts have multiple random cracking, with NE and SW corners most evident-approx 4' on each end.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-126-31.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	SUMMIT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 2.5 NO. GREAT BEND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 11' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 44' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	674267.6 5117701.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 38 Tons
208 Dk Overburden	201 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1977 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	525 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	90.88 Ft.	218 Channel Profile	1 48 06/25/2019
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	BRS-3925(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen, Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 39-126-31.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
15/2:Pre Concrete Top Flange	sq.ft	2,730	100	2,730	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	728	96	698	4	30	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
1110/1:Cracking (PSC)	ft	25	0	0	100	25	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	59	75	44	25	15	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
1090/2:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
1130/2:Cracking (RC and Other)	ft	8	0	0	100	8	0	0	0	0
330/1:Metal Bridge Railing	ft	180	94	170	3	5	3	5	0	0
1020/1:Connection	ft	10	0	0	50	5	50	5	0	0
515/1:Steel Protective Coating	sq.ft	100	90	90	10	10	0	0	0	0
331/1:Re Conc Bridge Railing	ft	180	89	160	11	20	0	0	0	0
1130/1:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
8398/2:Slope Protection	each	2	0	0	100	2	0	0	0	0
2210/2:Movement	each	2	0	0	100	2	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B&A end markers on all corners. Gravel on the deck has plugged several of the drains.

Alert Code 1: Minor concrete cracking throughout structure. Spall in west end of end beam at north abutment and & south abutment has spalls at sw, middle & se corners. NW rail post detached due to traffic impact. Debris under Span 1.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-126-33.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	SUMMIT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2.5 E OF GREAT BEND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 09' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 45' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	673583.9 5113471.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2013 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	400 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	9.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	November 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	36.0 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	23.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	03/18/2013
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CER-3934(056)
53 Min Vert Clear. Over Bridge	99 Ft. 11 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen, Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	0.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
SINGLE 23 X 10 X 64' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-126-33.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	64	69	44	31	20	0	0	0	0
1010/1:Cracking	ft	16	0	0	100	16	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B&A end markers on all corners. Structure has minor separation of sections of up to 1" & misalignment up to 1/2".

Alert Code 1: South channel and end of barrel has minor silt accumulation. Barrel section 7 has a minor spall w/ exposed rebar.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-126-46.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	LA MARS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	TRIB. TO BOIS DE SIOUX R	102 Direction of Traffic	2 2-way traffic
09 Location	6 SOUTH 7 WEST FAIRMONT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 57' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 45' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	673704.0 5092571.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 21, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBRS-3946(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X6X50' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Structure Number: 39-126-46.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	98	71	70	29	28	0	0	0	0
1130/3:Cracking (RC and Other)	ft	28	0	0	100	28	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: No signing or guardrail. Channel has heavy vegetation growth, minor silt accumulated in the boxes.

Alert Code 1: Vertical hairline cracked, shear cracked at the headwall & roof corners.,

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-127-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	27.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	DWIGHT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 1 EAST DWIGHT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 20' 50.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 42' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	675747.6 5135159.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	3 Bank Prot Failed
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	3 Steel	Load Rating and Posting	
		31 Design Load	Unknown
45 No. Spans in Main Unit	1		P Posted for load
46 No. Approach Spans	1	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 15 28 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 10 18 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	2 20.0-29.9%below
Age and Service		209 Posted in "Tons"	03 Tons
27 Yr Built	1922 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	3 Intolerable - Correct
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	17 Ft.	90 Date of Last Inspection	June 27, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	18 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	Y 24 06/27/2019
47 Total Horizontal Clearance	16.7 Ft.	Underwater	N
48 Length of Max Span	61 Ft.	Other Special	N
49 Structure Length	81.04 Ft.	218 Channel Profile	1 48 06/19/2019
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	17.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 39-127-20.0

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Structure Number: 39-127-20.0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 39-127-20.0

215/2:Re Conc Abutment	ft	16	0	0	0	0	100	16	0	0
1130/2:Cracking (RC and Other)	ft	4	0	0	0	0	100	4	0	0
Notes:South abutment is pushed in and a section is missing. Abutment cap is only supported at east and west ends. - 6/27/2019										
2240/2:Loss of Bearing Area	ft	8	0	0	0	0	100	8	0	0
Notes:South abutment is pushed in and a section is missing. Abutment cap is only supported at east and west ends. - 6/27/2019										
4000/2:Settlement	ft	4	0	0	0	0	100	4	0	0
Notes:South abutment is pushed in and a section is missing. Abutment cap is only supported at east and west ends. - 6/27/2019										
216/2:Timber Abutment	ft	16	0	0	0	0	100	16	0	0
6000/2:Scour	ft	16	0	0	0	0	100	16	0	0
Notes:Scour has exposed bottom of both backwalls. - 6/27/2019										
227/3:Re Conc Pile	(EA)	2	100	2	0	0	0	0	0	0
231/1:Steel Pier Cap	ft	36	0	0	100	36	0	0	0	0
1000/1:Corrosion	ft	36	0	0	100	36	0	0	0	0
Notes:Steel pier cap has corrosion and has pack rust forming at the connections with steel stringers. - 6/27/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has completely failed - 6/27/2019										
330/1:Metal Bridge Railing	ft	161	0	0	100	161	0	0	0	0
1000/1:Corrosion	ft	121	0	0	100	121	0	0	0	0
Notes:Metal bridge rail has rust throughout structure - 6/27/2019										
7000/1:Damage	ft	40	0	0	100	40	0	0	0	0
Notes:Metal rail has traffic impact damage - 6/27/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has completely failed - 6/27/2019										
332/1:Timb Bridge Railing	ft	151	54	81	36	55	7	10	3	5
1140/1:Decay/Section Loss	ft	70	0	0	79	55	14	10	7	5
Notes:Railing has collision damage. Sections of timber curb are broken and missing - 6/27/2019										
6000/2:Scour	each	1	0	0	0	0	0	0	100	1
Notes:Scour has exposed bottom of both backwalls. Scour has exposed piling in south abutment. Roadway is narrowing due to washouts at all 4 corners of the structure due to scour & erosion - 6/27/2019										
7357/1:Pack Rust	each	1	0	0	100	1	0	0	0	0
Notes:Pack rust is forming throughout structure connections - 6/27/2019										
7362/1:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
7363/3:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:South abutment has section loss from the abutment being pushed in - 6/27/2019										
8401/2:Wings	each	2	100	2	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-127-20.0

Remarks: B&A end markers on ne and se corners. Vert. curve south. Horiz. curve north. Signed for "narrow bridge", "curve" & "25 mph" north, Red and white end markers on sw corner. Old concrete columns and steel piling under structure. W-beam attached to ne corner. Timber rail has had some areas repaired. Posted per LG 4/24/19 nmh 6-27-19 Road Closed signs located North and South of structure, called Richland county about the signs and they reported the bridge to be open. - 6/27/2019

Alert Code 1: Railing has collision damage. Scour has exposed piling in south abutment. Sections of timber curb are broken. Erosion at all bridge corners. Major wear on tread planks. Moderate channel erosion at SW ditch. Stringer 9 in north approach slab is tilted. - 6/27/2019

Alert Code 2: Scour has exposed bottom of both backwalls. Roadway is narrowing due to washouts at all 4 corners of the structure due to scour & erosion-see photos. Bent/damaged truss members: South endpost, upper chord U4-U5, U9-L9 Lt; U1-L1, U2-L2, U3-L3, U6-L6,L6-U7, U7-L7, North endpost Rt. - 6/27/2019

Alert Code 3: South abutment is pushed in and a section is missing. Abutment cap is only supported at east and west ends. - 6/27/2019

Fracture Critical: Inspection was completed at arms length with a hammer, extendable mirror and binoculars. See filenet documents on 11-15-18 for report and pictures. - 6/27/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-127-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	26.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	SUMMIT TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 2 NORTH GREAT BEND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 44' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	674525.8 5116715.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 3 6 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 0 0 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	26 Gravel/Dirt	209 Posted in "Tons"	06 Tons
Age and Service		Appraisal	
27 Yr Built	1923	67 Structural Condition	2 Intolerable - Replace
106 Yr Reconstructed	-1	68 Deck Geometry	3 Intolerable - Correct
42 Type of Service	1 Highway - On	69 Underclear. Vert & Horiz	N Not applicable (NBI)
	5 Waterway - Under	71 Waterway Adequacy	6 Equal Minimum
28 Lanes on Structure	2	72 App. Rdwy. Alignment	4 Minimum Tolerable
29 ADT	20	36 Traffic Safety Features	0 0 0 0
30 Year of ADT	2019	113 Scour Critical	U Unknown Scour
109 Average Daily Truck Traffic	-1.00		
19 Bypass, Detour Length	2 Miles		
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 19, 2019
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	Y 24 09/19/2019
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.1 Ft.	Other Special	N
48 Length of Max Span	32 Ft.	218 Channel Profile	1 48 06/17/2015
49 Structure Length	34.12 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 39-127-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	924	0	0	100	924	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	231	0	0	100	231	0	0	0	0
1150/1:Check/Shake	sq.ft	231	0	0	100	231	0	0	0	0
1180/1:Abrasion	sq.ft	462	0	0	100	462	0	0	0	0
113/1:Steel Stringer	ft	171	0	0	100	171	0	0	0	0
1000/1:Corrosion	ft	171	0	0	100	171	0	0	0	0
120/1:Steel Truss	ft	33	0	0	100	33	0	0	0	0
1000/1:Corrosion	ft	30	0	0	100	30	0	0	0	0
1020/1:Connection	ft	3	0	0	100	3	0	0	0	0
152/1:Steel Floor Beam	ft	16	0	0	100	16	0	0	0	0
1000/1:Corrosion	ft	16	0	0	100	16	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
162/1:Stl Gus Plate	each	20	0	0	100	20	0	0	0	0
1000/1:Corrosion	each	20	0	0	100	20	0	0	0	0
202/3:Steel Column	each	10	0	0	50	5	50	5	0	0
1000/3:Corrosion	each	10	0	0	50	5	50	5	0	0
216/3:Timber Abutment	ft	43	0	0	100	43	0	0	0	0
1020/3:Connection	ft	21	0	0	100	21	0	0	0	0
6000/3:Scour	ft	22	0	0	100	22	0	0	0	0
231/1:Steel Pier Cap	ft	39	0	0	0	0	100	39	0	0
1000/1:Corrosion	ft	39	0	0	0	0	100	39	0	0
330/1:Metal Bridge Railing	ft	39	0	0	64	25	23	9	13	5
1000/1:Corrosion	ft	15	0	0	100	15	0	0	0	0
1020/1:Connection	ft	5	0	0	0	0	0	0	100	5
1900/1:Distortion	ft	19	0	0	53	10	47	9	0	0
332/1:Timb Bridge Railing	ft	69	0	0	83	57	17	12	0	0
1140/1:Decay/Section Loss	ft	69	0	0	83	57	17	12	0	0
3440/1:Eff (Stl Protect Coat)	each	100	0	0	0	0	100	100	0	0
7357/1:Pack Rust	each	1	100	1	0	0	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	0	0	0	0	100	4	0	0
4000/2:Settlement	each	4	0	0	0	0	100	4	0	0

Remarks: NBI Remarks: Vertical curve - east. Erosion around wingwalls. Gravel on deck goes from none on the west to 6" on the east end of the deck. 6"x12" yellow end markers on all corners. Plate welded to web of Pile 5 at west abutment and new bolts throughout truss. - 9/19/2019

Alert Code 1: Varying degrees of rust and deterioration throughout structure. Abutment piling have heavy rust & minor section loss. Minor rail damage. Scour under structure. Top plank in both abuts is loose & sliding down, allowing gravel to fall from the deck. 2 north floor hangers are loose or missing. Loose bolt in upper chord connection plate at NE corner. West end of south rail is gone. - 9/19/2019

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SEC 409

Structure Number: 39-127-31.0

Fracture Critical: Fracture critical completed 11/19/2018. Inspection was done with a hammer and extendable mirror. - 9/19/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-127-32.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	46.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	SUMMIT TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 1 NORTH GREAT BEND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 44' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	674673.2 5115110.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 13 23 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 7 14 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	206 Gravel/Dirt	209 Posted in "Tons"	09 Tons
Age and Service		Appraisal	
27 Yr Built	1934 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	20 30 Year of ADT 2018	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 19, 2018
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.1 Ft.	Other Special	N
48 Length of Max Span	26 Ft.	218 Channel Profile	1 48 06/25/2019
49 Structure Length	27.89 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	02/16/2017
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kelsch, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 39-127-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	506	0	0	100	506	0	0	0	0
1180/1:Abrasion	sq.ft	506	0	0	100	506	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	253	0	0	89	225	11	28	0	0
1000/1:Corrosion	ft	225	0	0	100	225	0	0	0	0
1900/1:Distortion	ft	28	0	0	0	0	100	28	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
152/1:Steel Floor Beam	ft	16	0	0	100	16	0	0	0	0
1000/1:Corrosion	ft	16	0	0	100	16	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
202/3:Steel Column	each	10	0	0	0	0	100	10	0	0
1000/3:Corrosion	each	10	0	0	0	0	100	10	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
216/3:Timber Abutment	ft	39	0	0	100	39	0	0	0	0
1150/3:Check/Shake	ft	39	0	0	100	39	0	0	0	0
231/1:Steel Pier Cap	ft	39	0	0	46	18	54	21	0	0
1010/1:Cracking	ft	3	0	0	0	0	100	3	0	0
1900/1:Distortion	ft	18	0	0	0	0	100	18	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
330/1:Metal Bridge Railing	ft	56	0	0	91	51	9	5	0	0
1000/1:Corrosion	ft	51	0	0	100	51	0	0	0	0
1900/1:Distortion	ft	5	0	0	0	0	100	5	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
332/1:Timb Bridge Railing	ft	56	0	0	100	56	0	0	0	0
1140/1:Decay/Section Loss	ft	56	0	0	100	56	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
7363/3:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 6"x12" yellow end markers attached to sw corner of rail. Vertical curve east. Collision damage on south rail. Bolts missing from Girders 1, 3, & 9 at west abutment.

Alert Code 1: Varying degrees of rust and deterioration throughout structure. Piling have heavy rust and minor section loss. Minor scour under structure.

Alert Code 2: West Abutment cap is cracked at Girders 5 & 7, and is deformed. East cap is cracked at Girder 3.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-127-32.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	34.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	SUMMIT TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 6 SOUTH WAHPETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 44' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	674637.5 5115514.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 4 8 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 2 5 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	03 Tons
Age and Service		Appraisal	
27 Yr Built	1930 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	124 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 21, 2019
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 11/19/2018
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	18.4 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 06/25/2019
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	18.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	19.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-127-32.1

Structure Number: 39-127-32.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	581	0	0	100	581	0	0	0	0
1180/1:Abrasion	sq.ft	581	0	0	100	581	0	0	0	0
Notes:Deck has minor abrasion - 6/21/2019										
113/1:Steel Stringer	ft	240	0	0	0	0	100	240	0	0
1000/1:Corrosion	ft	240	0	0	0	0	100	240	0	0
Notes:Steel stringers are rusty - 6/21/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/21/2019										
120/1:Steel Truss	ft	59	0	0	42	25	58	34	0	0
1000/1:Corrosion	ft	44	0	0	57	25	43	19	0	0
Notes:Steel truss members are rusty - 6/21/2019										
1900/1:Distortion	ft	15	0	0	0	0	100	15	0	0
Notes:Bent or damaged members: Lower chord in panel 1, U2-L2, west end post Rt; Lower chord in panel 1 Lt. - 6/21/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Steel protective coating has almost completely failed. - 6/21/2019										
152/1:Steel Floor Beam	ft	20	0	0	0	0	100	20	0	0
1000/1:Corrosion	ft	20	0	0	0	0	100	20	0	0
Notes:Steel floor beams have rust. - 6/21/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/21/2019										
162/1:Stl Gus Plate	each	20	0	0	100	20	0	0	0	0
1000/1:Corrosion	each	20	0	0	100	20	0	0	0	0
Notes:Steel gusset plates are rusty - 6/21/2019										
206/3:Timber Column	each	20	0	0	25	5	65	13	10	2
1170/3:Split/Delamination (Timber)	each	20	0	0	25	5	65	13	10	2
Notes:All timber columns are split - 6/21/2019										
216/3:Timber Abutment	ft	49	0	0	0	0	100	49	0	0
1900/3:Distortion	ft	49	0	0	0	0	100	49	0	0
Notes:Both abutments are tipping in. - 6/21/2019										
235/1:Timber Pier Cap	ft	49	0	0	80	39	20	10	0	0
1140/1:Decay/Section Loss	ft	10	0	0	0	0	100	10	0	0
Notes:South half of west abutment cap is crushing - 6/21/2019										
1150/1:Check/Shake	ft	39	0	0	100	39	0	0	0	0
Notes:cracking throughout timber pier cap - 6/21/2019										
330/1:Metal Bridge Railing	ft	59	0	0	100	59	0	0	0	0
1000/1:Corrosion	ft	59	0	0	100	59	0	0	0	0

Structure Number: 39-127-32.1

Notes: Bridge rail is rusty - 6/21/2019										
515/1: Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1: Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: Steel protective coating has failed - 6/21/2019										
332/1: Timb Bridge Railing	ft	59	0	0	100	59	0	0	0	0
1150/1: Check/Shake	ft	59	0	0	100	59	0	0	0	0
Notes: Timber bridge rail has checks and shakes throughout. - 6/21/2019										
6000/2: Scour	each	1	0	0	100	1	0	0	0	0
Notes: Moderate shoulder scour behind wingwalls at all corners, which is reducing the width of the driving surface - 6/21/2019										
7362/1: Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
8398/3: Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/3: Settlement	each	2	0	0	100	2	0	0	0	0
Notes: riprap is settling into the soil around it. - 6/21/2019										
8401/2: Wings	each	4	0	0	0	0	100	4	0	0
1140/2: Decay/Section Loss	each	4	0	0	0	0	100	4	0	0
Notes: South wing walls are missing the top half. - 6/21/2019										

Remarks: Posted for 3 tons. Lower laterals & sway braces have been removed. No end markers. Horizontal curve - east. Vertical curve - west. Bridge is on a private drive. North end of floor beam is spliced, overlapped, welded, & bolted. Some rivets have been replaced with bolts at U3 and L2 Rt and Lt. - 6/21/2019

Alert Code 1: Both abutments are tipping in. Moderate shoulder scour behind wingwalls at all corners, which is reducing the width of the driving surface. Light to moderate rust throughout the superstructure. South wing walls are missing the top half. Scour under structure. - 6/21/2019

Alert Code 2: Bent or damaged members: Lower chord in panel 1, U2-L2, west end post Rt; Lower chord in panel 1 Lt. - 6/21/2019

Alert Code 3: Both abutment caps have rotated, and the east cap has full bearing on the back wall. The south end of the west cap is crushed. - 6/21/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-127-33.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Major Collector
04 City	SUMMIT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03934 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN NO. 20	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST OF GREAT BEND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	25.594	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 09' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 43' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	675091.1 5113507.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	255 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	November 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	9 Ft.	Other Special	N
49 Structure Length	27.89 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBRS-3934(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nguyen, Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 9X9X66' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 39-127-33.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	197	78	154	22	43	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
1130/3:Cracking (RC and Other)	ft	42	0	0	100	42	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Some dirt and debris in boxes. Debris build-up at south side, blocking west 2 boxes.

Alert Code 1: Minor, random parapet cracking. Spall 1' above floor at NE corner of E box.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-128-27.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	28.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	CENTER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 1 SOUTH WAHPETON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 15' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 41' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	677317.4 5124753.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	3 Bank Prot Failed
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	3 Steel	Load Rating and Posting	
		31 Design Load	Unknown
45 No. Spans in Main Unit	1		
46 No. Approach Spans	2	41 Structure Open, Closed or Posted	K Closed to all traffic
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 6 10 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 3 7 Tons
208 Dk Overburden	1 None	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	03 Tons
27 Yr Built	1914 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	2 Intolerable - Replace
	5 Waterway - Under	68 Deck Geometry	3 Intolerable - Correct
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	13 Ft.	90 Date of Last Inspection	June 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	18 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	Y 24 06/21/2019
47 Total Horizontal Clearance	17.4 Ft.	Underwater	N
48 Length of Max Span	44 Ft.	Other Special	N
49 Structure Length	73.16 Ft.	218 Channel Profile	1 48 06/22/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	17.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-128-27.1

Structure Number: 39-128-27.1

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Structure Number: 39-128-27.1

515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/21/2019										
313/1:Fixed Bearing	each	4	0	0	0	0	100	4	0	0
1000/1:Corrosion	each	4	0	0	0	0	100	4	0	0
Notes:Fixed bearings are rusty - 6/21/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/21/2019										
330/1:Metal Bridge Railing	ft	148	0	0	0	0	73	108	27	40
1000/1:Corrosion	ft	108	0	0	0	0	100	108	0	0
Notes:Bridge rails are rusty - 6/21/2019										
7000/1:Damage	ft	40	0	0	0	0	0	0	100	40
Notes:Bridge rail has traffic impact damage - 6/21/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/21/2019										
332/1:Timb Bridge Railing	ft	108	0	0	100	108	0	0	0	0
1160/1:Crack (Timber)	ft	108	0	0	100	108	0	0	0	0
Notes:Timber curb has minor shrinkage cracking - 6/21/2019										
4000/3:Settlement	each	1	100	1	0	0	0	0	0	0
7356/1:Steel Cracking/Fatigue	each	1	0	0	0	0	100	1	0	0
Notes:N abutment cap cracked at stringer 2&3 - 6/21/2019										
7357/1:Pack Rust	each	1	100	1	0	0	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	0	0	0	0	100	1	0	0
Notes:railing has collision damage - 6/21/2019										
7363/1:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Rust and section loss of all piling at waterline - 6/21/2019										
8401/2:Wings	each	4	50	2	50	2	0	0	0	0
Notes:SE wingwall has been replaced with a Gabion. - 6/21/2019										
1900/2:Distortion	each	2	0	0	100	2	0	0	0	0
Notes:Both North wing wall are bowed at the top - 6/21/2019										

Remarks: B&A end markers on NW, NE, & SW corners. Slight vertical curves both directions. Caissons & abutments are out of plumb, all measurements in 2': ??/?: NW caisson, bottom is in 1" in 2'. SE caisson, bottom is in 1/2" in 2', SW caisson, bottom is in 1/2" in 2', S abut. bottom is in 3/4" . 10/07: se 1/4" in 2', sw 1/2" in 2', s backwall 1 1/4" in 2' , n caissons 3/4" in 2'. 12/08: n abut 3/4", s abut 1", caissons: nw 1" n/s, 3/4" e/w; ne 3/4" n/s, 1/2" e/w; sw 3/4" n/s, 1/4", NW Cas. W 1/4"-S 7/8", NE Cas. W 1/2"-S 1/2", SW Cas. S 3/8"-W 1/2" SE Cas. W 3/8"-S 1/4", S. abut on center pile 3/4". N Abut Pile 5: 1-1/2" below brace. S. Abut center pile: 1/2". caissons: nw 1" n/s, 1/4" e/w; ne N/A; sw 1/2" n/s & e/w; se 1/4" n/s, 1" e/w. 1/16: NW 1 1/8", NE 3/4", SE 7/8", SW 7/8". B&A @ NE is damaged. SE wingwall has been replaced with a Gabion. 6-21-19 water still flowing high, unable to inspect the underside of bridge. - 6/21/2019 Bridge closed due to roadway north of bridge has washed out and there are washouts behind both abutments - 6/21/2019 Comment moved from Critical Finding cta. 10-10-19

Structure Number: 39-128-27.1

Alert Code 1: Varying degrees of rust and deterioration throughout structure. railing has collision damage. 12/08: all meas in 2'-n abut 3/4", s abut 1", caissons: nw 1" n/s, 3/4" e/w; ne 3/4" n/s, 1/2" e/w; sw 3/4" n/s, 1/4". Caissons 10/18 SW-1" in 2' S and 1/4" in 2' W. SE-3/4" in 2' S, 1/4" in 2' W. debris under and to the East of the structure. Rust and section loss of all piling at waterline. Driving planks are worn. Bottom of both backwall exposed. - 6/21/2019

Alert Code 2: Bent and/or damaged members: SW end post, panel point #1 Lt, sway brace #'s 1 and 2 Rt, U1-L1, U3-L2, U3-L3, U3-L4 Rt, Stringer #3 in Span 2, east stringer in Span 1. Some rivets replaced with bolts, several of which are loose: 1 loose in upper connection of Sway Brace 2 Lt, 1 loose in upper chord of U3 Lt, 1 loose in each upper chord splice plate over U3 Rt & Lt, & 6 loose in U3 Rt gusset connection. West truss has damaged at U0 L0, East truss has vertical # 1 R, diagonal up 3 L4 has bent. - 6/21/2019

Alert Code 3: North abutment pile are bowed & twisted, South abutment pile bowed. Both abutment cap is bent and twisted. N abutment cap cracked at stringer 2&3. North span stringer 1 had no contact with cap. Multiple stringers missing bolts at caps. South abutment pile 4, 5 missing bolts to cap. - 6/21/2019

Fracture Critical: Inspection was completed with a hammer, extendable mirror and binoculars. See filenet documents on 12/14/2018 and 2/13/2018 for report and pictures. - 6/21/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 39-128-43.2

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	36.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	LA MARS TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 4 SOUTH SONORA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 00' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 42' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	677981.9 5098343.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	3 Serious
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 6 10 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 1 3 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	24 Gravel/Dirt	209 Posted in "Tons"	03 Tons
Age and Service		Appraisal	
27 Yr Built	1928 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 20, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 11/20/2018
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.0 Ft.	Other Special	N
48 Length of Max Span	31 Ft.	218 Channel Profile	1 48 04/30/2019
49 Structure Length	33.14 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	19.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 39-128-43.2

Structure Number: 39-128-43.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	667	0	0	100	667	0	0	0	0
1160/1:Crack (Timber)	sq.ft	667	0	0	100	667	0	0	0	0
Notes:Timber elements have cracking throughout structure. - 6/20/2019										
113/1:Steel Stringer	ft	364	0	0	100	364	0	0	0	0
1000/1:Corrosion	ft	364	0	0	100	364	0	0	0	0
Notes:Steel elements have rust - 6/20/2019										
515/1:Steel Protective Coating	sq.ft	364	0	0	100	364	0	0	0	0
Notes:Steel elements have rust - 6/20/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/20/2019										
120/1:Steel Truss	ft	66	0	0	88	58	12	8	0	0
1000/1:Corrosion	ft	60	0	0	97	58	3	2	0	0
Notes:Corrosion throughout steel members - 6/20/2019										
1020/1:Connection	ft	2	0	0	0	0	100	2	0	0
Notes:U2-L2 Lt and lower chord eye bars (Lt & Rt) are bent. U1-L2 Lt. exterior eye bar forge weld has failed and has been reinf with 1/2" cable and clamps. - 6/20/2019										
1900/1:Distortion	ft	2	0	0	0	0	100	2	0	0
Notes:Traffic impact damage to truss - 6/20/2019										
7357/1:Pack Rust	ft	2	0	0	0	0	100	2	0	0
Notes:Pack rust on upper members of truss - 6/20/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/20/2019										
152/1:Steel Floor Beam	ft	20	0	0	100	20	0	0	0	0
1000/1:Corrosion	ft	20	0	0	100	20	0	0	0	0
Notes:All steel elements have rust - 6/20/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has failed - 6/20/2019										
161/1:Stl Pin Pin/Han both	each	12	0	0	100	12	0	0	0	0
1000/1:Corrosion	each	12	0	0	100	12	0	0	0	0
Notes:All steel elements have rust - 6/20/2019										
206/3:Timber Column	each	10	0	0	100	10	0	0	0	0
1160/3:Crack (Timber)	each	10	0	0	100	10	0	0	0	0
Notes:all timber elements have cracking - 6/20/2019										
216/3:Timber Abutment	ft	39	0	0	100	39	0	0	0	0
1160/3:Crack (Timber)	ft	39	0	0	100	39	0	0	0	0
Notes:All timber elements have cracking - 6/20/2019										
231/1:Steel Pier Cap	ft	20	0	0	0	0	100	20	0	0
1900/1:Distortion	ft	20	0	0	0	0	100	20	0	0

Structure Number: 39-128-43.2

Notes:the north cap is distorted. - 6/20/2019											
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100	
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100	
Notes:Steel protective coating has failed - 6/20/2019											
235/1:Timber Pier Cap	ft	23	0	0	0	0	100	23	0	0	
1900/1:Distortion	ft	23	0	0	0	0	100	23	0	0	
Notes:Both abutment caps have moderate rotation, and the north cap is distorted. - 6/20/2019											
313/1:Fixed Bearing	each	4	100	4	0	0	0	0	0	0	
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100	
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100	
Notes:Steel protective coating has failed - 6/20/2019											
330/1:Metal Bridge Railing	ft	66	0	0	100	66	0	0	0	0	
1900/1:Distortion	ft	66	0	0	100	66	0	0	0	0	
Notes:traffic impact damage to metal railing - 6/20/2019											
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100	
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100	
Notes:Steel protective coating has failed - 6/20/2019											
332/1:Timb Bridge Railing	ft	66	46	30	55	36	0	0	0	0	
1180/1:Abrasion	ft	36	0	0	100	36	0	0	0	0	
Notes:Bridge rail has abrasion from road grader pushing gravel across bridge - 6/20/2019											
7356/1:Steel Cracking/Fatigue	each	1	0	0	100	1	0	0	0	0	
Notes:Forge weld at lower exterior eye chord bar at the SE end post is cracked through, and has been welded. - 6/20/2019											
7357/1:Pack Rust	each	1	100	1	0	0	0	0	0	0	
Notes:Pack rust between east upper chord connection plates. - 6/20/2019											
7362/1:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0	
7363/1:Steel Section Loss	each	1	0	0	100	1	0	0	0	0	
Notes:section loss at NW truss joint - 6/20/2019											
8401/2:Wings	each	4	25	1	75	3	0	0	0	0	

Remarks: 6"x12" yellow end markers at all 4 corners. Signed for 3 tons and No Trucks. Lots of welding & reinforcing done to west end posts & top chord. 4"x4" box beam vert members have been installed at U1-L1 & U3-L3 Rt & Lt - welded to stringers 1 & 11 with 4"x4" box beam welded at U1 & U3 Rt & Lt & extending under & welded to stringers 1-4 & 8-11 & a partial floorbeam. Steel straps have been welded to stringers 2-4 & 8-10 & pass under floorbeam. Repairs appear to only add to dead load. No washers at west eye bars on top west end posts. Fracture critical inspection done on 11/20/2018. - 6/20/2019

Alert Code 1: Railings have collision damage. Light to moderate rust - entire structure. Varying degrees of timber deterioration throughout substructure. Pins in west truss member not moving. Gravel on both abutment caps due to separation of deck planks. Minor scour under structure. Pack rust between east upper chord connection plates. - 6/20/2019

Alert Code 2: U2-L2 Lt and lower chord eye bars (Lt & Rt) are bent. U1-L2 Lt. exterior eye bar forge weld has failed and has been reinf with 1/2" cable and clamps. Both abutment caps have moderate rotation, and the north cap is distorted. - 6/20/2019

Alert Code 3: Forge weld at lower exterior eye chord bar at the SE end post is cracked through, and has been welded. - 6/20/2019

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SEC 409

Structure Number: 39-131-43.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	36.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Richland	26 Functional	Rural, Local
04 City	LA MARS TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COUNTY DRAIN	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 3 SOUTH FAIRMOUNT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 00' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 38' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	682816.0 5098416.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	2 Critical
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 3 6 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 0 0 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	24 Gravel/Dirt	209 Posted in "Tons"	03 Tons
Age and Service		Appraisal	
27 Yr Built	1924 106 Yr Reconstructed -1	67 Structural Condition	0 Closed
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 20, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 11/14/2016
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	18.4 Ft.	Other Special	N
48 Length of Max Span	33 Ft.	218 Channel Profile	Y 48 06/25/2015
49 Structure Length	35.10 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	18.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	19.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Structure Number: 39-131-43.0

Structure Number: 39-131-43.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	689	0	0	100	689	0	0	0	0
1180/1:Abrasion	sq.ft	689	0	0	100	689	0	0	0	0
113/1:Steel Stringer	ft	384	0	0	100	384	0	0	0	0
1000/1:Corrosion	ft	384	0	0	100	384	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protection has failed - 6/20/2019										
120/1:Steel Truss	ft	69	99	68	0	0	1	1	0	0
1900/1:Distortion	ft	1	0	0	0	0	100	1	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protection has failed - 6/20/2019										
152/1:Steel Floor Beam	ft	20	0	0	100	20	0	0	0	0
1000/1:Corrosion	ft	20	0	0	100	20	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protection has failed - 6/20/2019										
162/1:Stl Gus Plate	each	24	100	24	0	0	0	0	0	0
206/3:Timber Column	each	10	0	0	60	6	0	0	40	4
1140/3:Decay/Section Loss	each	4	0	0	0	0	0	0	100	4
Notes:South abutment piles 2 thru 5 snapped - 6/20/2019										
1160/3:Crack (Timber)	each	6	0	0	100	6	0	0	0	0
216/3:Timber Abutment	ft	43	0	0	49	21	51	22	0	0
1160/3:Crack (Timber)	ft	21	0	0	100	21	0	0	0	0
4000/3:Settlement	ft	22	0	0	0	0	100	22	0	0
235/1:Timber Pier Cap	ft	46	0	0	94	43	7	3	0	0
1160/1:Crack (Timber)	ft	43	0	0	100	43	0	0	0	0
1170/1:Split/Delamination (Timber)	ft	3	0	0	0	0	100	3	0	0
313/1:Fixed Bearing	each	4	0	0	100	4	0	0	0	0
1000/1:Corrosion	each	4	0	0	100	4	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protection has failed - 6/20/2019										
330/1:Metal Bridge Railing	ft	69	0	0	49	34	51	35	0	0
1900/1:Distortion	ft	69	0	0	49	34	51	35	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protection has failed - 6/20/2019										
332/1:Timb Bridge Railing	ft	69	0	0	100	69	0	0	0	0

Structure Number: 39-131-43.0

1180/1:Abrasion	ft	69	0	0	100	69	0	0	0	0
4000/1:Settlement	each	1	100	1	0	0	0	0	0	0
7356/1:Steel Cracking/Fatigue	each	1	0	0	0	0	100	1	0	0
7357/1:Pack Rust	each	1	100	1	0	0	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
7363/1:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
8401/2:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: No end markers. Minor collision damage to upper railing. Lower railing has been removed. Old piling in channel. Nov 15 2016 , South abutment pile # 2/3 & 4 had cracked/shakeed with brooming apeareed all other timber element has moderate cracked, ALL steel elements have failed on steel protective coating , west truss, vert has traffic impacted. BRIDGE CLOSED 11-2-2017, 6/20/19 - 6/20/2019

Alert Code 1: Moderate rust throughout. Varying degrees of timber deterioration. Both caps cracked and slightly rotated. - 6/20/2019

Alert Code 2: Both bottom chords bent. Lower lateral rods have been removed and replaced with 2"x 2" angle iron bolted to stringers -1 per panel. U2-L2 is bent. Upper chord has been cut at U1 Lt and U3 Rt. U1 has been replaced with 188" plates bolted to interior webs and top flange.U3 has been repaired with 188" plates bolted to exterior webs and top flange. East end of floor beam has been spliced between Stringer 39;s 9 and 10 using a 24" lap weld on the south side and a 16" lap weld on the north side. Laps are also bolted with 189 bolts. Rivets broken at rail post ends. Pack rust at plates. Many rivets replaced with bolts. - 6/20/2019

Alert Code 3: South abutment is bowed in and Pile Nos. 4 of 5 are snapped. South cap is cracked. - 6/20/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 40-102-10.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Rolette	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04001 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 4 NORTH DUNSEITH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.899	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 51' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 08' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	416436.3 5412868.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2001 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	80 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 27, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	SC-4001(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Trotter, Horn, Ebensteiner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X6X108' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Structure Number: 40-102-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	217	100	217	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
Notes:Spall 1' on NW wing. - 8/27/2019										
1080/3:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes:Spall on NW Wing. - 8/27/2019										

Remarks: 9/19/2017 - Debris on West side blocking North barrel. 8/27/2019 - Debris is still blocking the North Barrel on the West side. - 8/27/2019

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SEC 409

Structure Number: 40-102-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Rolette	26 Functional	Rural, Local
04 City	KOHLMEIER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	INDIAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 SOUTH 3 WEST DUNSEITH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 41' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 08' 07.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	416448.5 5393649.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 42 77 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 41 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1976 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	August 28, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	27 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	1 48 06/26/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Trottier, Horn, Ebensteiner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 40-102-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	239	100	239	0	0	0	0	0	0
206/3:Timber Column	each	22	100	22	0	0	0	0	0	0
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	59	100	59	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	59	93	55	7	4	0	0	0	0
Notes:4 Corners cracked with Exposed Rebar on 3 corners. - 8/28/2019										
1090/2:Exposed Rebar	ft	3	0	0	100	3	0	0	0	0
Notes:Exposed rebar on the NE, NW and SE Corners. - 8/28/2019										
1130/2:Cracking (RC and Other)	ft	1	0	0	100	1	0	0	0	0
Notes:Just cracked on the SW corner. - 8/28/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Curb cracked on all four corners. Bridge end markers down. Scour hole south of bridge. 8/28/2019 - No Bridge End Markers. - 8/28/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 40-102-22.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	45.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Rolette	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 SOUTH 3 WEST DUNSEITH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 41' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 07' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	417243.8 5394618.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 6 10 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 3 6 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	05 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	3 Intolerable - Correct
109 Average Daily Truck Traffic	1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 28, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	20 Ft.	218 Channel Profile	1 48 07/10/2017
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Trotter, Horn, Ebensteiner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 40-102-22.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	552	100	552	0	0	0	0	0	0
117/1:Timber Stringer	ft	528	100	528	0	0	0	0	0	0
206/1:Timber Column	each	10	100	10	0	0	0	0	0	0
216/1:Timber Abutment	ft	48	50	24	50	24	0	0	0	0
Notes:South Abutment Tilting - 8/28/2019										
1900/1:Distortion	ft	24	0	0	100	24	0	0	0	0
Notes:South Abutment is Tilting 5" in 4'. - 8/28/2019										
235/1:Timber Pier Cap	ft	48	100	48	0	0	0	0	0	0
Notes:Tilting on the pile on the South Abutment. - 8/28/2019										
332/1:Timb Bridge Railing	ft	48	100	48	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Poor roadway alignment both directions. Trees and brush restricting channel east of bridge only. No bridge end markers. No advanced warning sign on South side. 9/29/15 9/19/2017 - Still no bridge end marker. 8/28/2019 - No Bridge End Markers Still. - 8/28/2019

Alert Code 1: 9/30/13 - South Timber Piles are leaning in 5" in 4' causing Pile Cap to tilt out.9/29/15 no change in tilt. 9/19/2017 - No change in tilt. 8/28/2019 - No change in tilt. - 8/28/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 40-102-28.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Rolette	26 Functional	Rural, Major Collector
04 City	SOUTH VALLEY TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04028 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	OX CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	17 NORTH 5 WEST OF RUGBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.800	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 36' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 07' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	416465.3 5383974.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 27 48 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 12 22 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1970 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	65 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	August 27, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	44 Ft.	Other Special	N
49 Structure Length	45.93 Ft.	218 Channel Profile	1 48 06/25/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	ER-14(1)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Trottier, Horn, Ebensteiner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 40-102-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	459	100	459	0	0	0	0	0	0
217/3:Masonry Abutment	ft	59	100	59	0	0	0	0	0	0
Notes:This Element should be 218, unless there is another Element for Steel. - 8/27/2019										
231/2:Steel Pier Cap	ft	59	0	0	100	59	0	0	0	0
Notes:Freckled rust present across the whole element. - 8/27/2019										
1000/2:Corrosion	ft	59	0	0	100	59	0	0	0	0
Notes:No change in the condition state. - 8/27/2019										
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	92	100	92	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	92	100	92	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Heavy channel scouring. No bridge end markers.. 9/19/2017 - No Bridge end markers. 8/27/2019 - No Bridge End Markers. Element 217 should be changed to 218 because it is not a Masonary Abutment (It is Steel) See Pictures. - 8/27/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 40-102-28.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Rolette	26 Functional	Rural, Major Collector
04 City	SOUTH VALLEY TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04028 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	OX CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	17 NORTH 5 WEST OF RUGBY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.400	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 36' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 08' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	416146.9 5383975.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 27 49 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 12 23 Tons
208 Dk Overburden	23 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1970 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	65 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	August 27, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	41.01 Ft.	218 Channel Profile	1 48 06/26/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	ER-14(2)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Trotter, Horn, Ebensteiner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 40-102-28.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
15/2:Pre Concrete Top Flange	sq.ft	1,230	100	1,230	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	410	100	410	0	0	0	0	0	0
219/2:Stl Abutment	ft	59	100	59	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	59	0	0	100	59	0	0	0	0
Notes:Due to Freckled Rust. - 8/27/2019										
1000/2:Corrosion	ft	59	0	0	100	59	0	0	0	0
Notes:Freckled rust on the whole Pier cap on both sides. - 8/27/2019										
515/2:Steel Protective Coating	sq.ft	100	50	50	50	50	0	0	0	0
Notes:Half of the coating has failed on the caps. - 8/27/2019										
330/2:Metal Bridge Railing	ft	82	100	82	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	82	100	82	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Light scouring in channel.Ne,nw & sw end markers are down. SE end marker is up. 8/27/2019 -
 No Bridge end markers. Abutment should be labeled as Element 218 and not 217 due to being a Steel Abutment
 (See Pictures). - 8/27/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 40-105-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	70.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Rolette	26 Functional	Rural, Local
04 City	CURRIE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 SOUTH DUNSEITH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 47' 29.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 04' 58.00"	112 NBIS Bridge Length	No
GPS Coordinates XY	420483.9 5404826.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	4 Considerable Damage
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1950 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	August 28, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	20.3 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	20.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	20.3 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	22.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Trotter, Horn, Ebensteiner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 9.5X7.5X20' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 40-105-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	43	0	0	100	43	0	0	0	0
Notes:Full length of wall has Delamination. - 8/28/2019										
1080/3:Delamination/Spall/Patched Area	ft	42	0	0	100	42	0	0	0	0
Notes:Full length Delaminated - 8/28/2019										
1090/3:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:SE corner of East wall. - 8/28/2019										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
Notes:Showing delamination section loss - 8/28/2019										
1080/3:Delamination/Spall/Patched Area	each	4	0	0	100	4	0	0	0	0

Remarks: 9/4/2007 - 6" Concrete placed over old floor New Dimensions 9.5'x7'x20' 9/30/13 - No Bridge End Markers.
 9/29/15 Still no bridge end markers 9/07/2017 - Still no bridge end markers! 8/28/2019 - No Bridge End Markers.
 - 8/28/2019

Alert Code 1: Erosion around wings and under floor on south end. Concrete delaminating on all walls and wings. Six inches concrete placed over old floor. - 8/28/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 40-105-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Rolette	26 Functional	Rural, Local
04 City	KOHLMEIER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MUD CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 SOUTH DUNSEITH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 42' 17.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 04' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	421238.4 5395189.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1994 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 28, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-40(4) & BRO-40(5)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Trotter, Horn, Ebensteiner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X7X82' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 40-105-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	164	100	164	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: One inch gaps in the center wall. - 8/28/2019

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 40-106-13.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Rolette	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH OF DUNSEITH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 49' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 03' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	421939.5 5408020.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 43 78 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 26 47 Tons
208 Dk Overburden	212 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1930 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	August 27, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	20.3 Ft.	Underwater	N
48 Length of Max Span	24 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	1 48 07/06/2015
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	20.3 Ft.	212 Structure Load Rated	10/21/2013
52 Deck Width	21.7 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Trottier, Horn, Ebensteiner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 40-106-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	560	95	532	5	28	0	0	0	0
110/2:Re Conc Opn Girder/Beam	ft	118	100	118	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	45	0	0	100	45	0	0	0	0
331/2:Re Conc Bridge Railing	ft	51	0	0	69	35	0	0	31	16
8401/2:Wings	each	4	50	2	50	2	0	0	0	0

Remarks: _ NBI Remarks: Lacks all signs. Minor cracking on abutments. South wingwalls are broken. Channel at 45 degree skew to the bridge. No riprap. 9/19/2017 - Found county has built a new bridge over the top of the existing bridge. 2019 - Still No update on the info in the file. See Pictures. - 8/27/2019

Alert Code 1: Twelve inches of overburden on the deck. - 8/27/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 40-107-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Rolette	26 Functional	Rural, Local
04 City	KOHLMEIER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MUD CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 WEST 4 NORTH OF ROLETTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 42' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	100d 00' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	425316.8 5395771.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	B Posting Recommended
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 31 56 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 22 41 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	11 Tons
Age and Service		Appraisal	
27 Yr Built	1935 106 Yr Reconstructed	2002	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	2019	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	17 Ft.	90 Date of Last Inspection	August 28, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.3 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	1 48 06/25/2019
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	23.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Trotter, Horn, Ebensteiner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 40-107-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	570	100	570	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	23	0	0	100	23	0	0	0	0
Notes:Lost its coating and rusting. - 8/28/2019										
1000/2:Corrosion	ft	23	0	0	100	23	0	0	0	0
Notes:Rusting due to loss of coating. - 8/28/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
Notes:No coating left on Beam. - 8/28/2019										
111/2:Timber Open Girder	ft	239	100	239	0	0	0	0	0	0
210/2:Re Conc Pier Wall	ft	23	0	0	100	23	0	0	0	0
Notes:Abrasion on the wall. - 8/28/2019										
1190/2:Abrasion(PSC/RC)	ft	23	0	0	100	23	0	0	0	0
Notes:Pier wall has abrasion. - 8/28/2019										
215/2:Re Conc Abutment	ft	46	0	0	100	46	0	0	0	0
Notes:Both Abutments are settling on the East end and Tilting inward. - 8/28/2019										
4000/2:Settlement	ft	46	0	0	100	46	0	0	0	0
Notes:Whole structure settling to the East. - 8/28/2019										
332/1:Timb Bridge Railing	ft	46	100	46	0	0	0	0	0	0
8401/2:Wings	each	4	50	2	0	0	50	2	0	0
Notes:West Wings are Cracking. - 8/28/2019										
1130/2:Cracking (RC and Other)	each	2	0	0	0	0	100	2	0	0
Notes:Large cracks on the West Wings. - 8/28/2019										

Remarks: New deck and beams 2001 NBI Remarks: New deck. New girders. Cracks in north abutment. Bridge end markers have been removed, laying on deck. 9/29/15 - Bridge end markers still down. End markers still down 2017. 8/28/2019 - Bridge end markers down and Posted sign on North end is gone so marking as Not Posted. - 8/28/2019

Alert Code 1: North abutment tilted inward 3"; in 4'. No change in tilt 2013. No change in tilt 2015. 9/19/2017 - Tilt on NE corner is 3 3/4" in 4'. - 8/28/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 40-113-28.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Rolette	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	OX CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 4 SOUTH ROLETTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 36' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 53' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	434792.5 5383964.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 40 72 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 38 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1976 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	August 27, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	1 48 06/26/2019
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Trotter, Horn, Ebensteiner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 40-113-28.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	322	100	322	0	0	0	0	0	0
206/3:Timber Column	each	22	100	22	0	0	0	0	0	0
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	79	100	79	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	79	100	79	0	0	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
Notes:Riprap is Displaced. - 8/27/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Three foot scour hole in the channel under the structure. Se & sw end markers down. 9/30/15 - No Bridge end markers.9/20/2017 - 8/27/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 40-115-27.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Rolette	26 Functional	Rural, Major Collector
04 City	ROLETTE CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04015 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	OX CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH OF ROLETTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 37' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 50' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	437978.5 5386306.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2006 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	August 27, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.9 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	46.92 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	SC-4015(054)BRC-4015(055)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Trottier, Horn, Ebensteiner
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD, 11'X 6'X 60' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 40-115-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	240	100	240	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Alert Code 1: Sediment in south barrel 4' deep, 1' in the middle 2 barrels, and 2' deep in north barrel. Same on 9/30/15.
8/27/2019 - Sediment in the barrels has not changed. - 8/27/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 40-117-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Rolette	26 Functional	Rural, Local
04 City	LEONARD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	OX CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 2 SOUTH ROLETTE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 38' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 47' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	441214.6 5387701.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 34 62 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 31 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1976 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 27, 2019
32 Approach Roadway Width	23 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.6 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 06/26/2019
49 Structure Length	40.03 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Trotter, Horn, Ebensteiner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 40-117-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
15/2:Pre Concrete Top Flange	sq.ft	1,176	100	1,176	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	322	100	322	0	0	0	0	0	0
206/3:Timber Column	each	18	100	18	0	0	0	0	0	0
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
Notes:Starting to notice minor cracks in the Pier Caps. - 8/27/2019										
1160/2:Crack (Timber)	ft	10	100	10	0	0	0	0	0	0
Notes:Noticing cracks starting in the Pier caps - 8/27/2019										
330/2:Metal Bridge Railing	ft	79	100	79	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	79	100	79	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: One bridge end marker up in ne corner. Poor channel alignment east side. 9/30/13 - No bridge end markers up. 9/30/15 Still no Bridge end markers.9/20/2017 8/27/2019 - No Bridge End Markers - 8/27/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-105-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Sargent	26 Functional	Rural, Local
04 City	DENVER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST 4 NORTH STIRUM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 16' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 54' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	584061.9 5124513.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2004 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 13, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	AC-BRO-0041(007)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X5X44' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-105-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	88	100	88	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8402/1:Headwalls	each	2	100	2	0	0	0	0	0	0

Remarks: Single B&A end markers on all four corners. Channel has large amount of cattails.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-117-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	51.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Sargent	26 Functional	Rural, Local
04 City	TAYLOR TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BR. OF WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 2 WEST OF HAVANA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 57' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	603685.2 5090965.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	3 Serious
99 Border Bridge Struct No.	–	59 Superstructure	3 Serious
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 18 32 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 10 19 Tons
Dk Protect	None	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 17, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.1 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 04/24/2017
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	02/16/2017
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 41-117-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	538	0	0	74	396	11	58	16	84
1080/1:Delamination/Spall/Patched Area	sq.ft	84	0	0	0	0	0	0	100	84
Notes:The deck has concrete deterioration along both fascia beams, the deteriorated concrete is and has lost bond with reinforcing steel. The concrete between the south fascia girder has failed and there is 6 foot by 2 foot hole in the concrete deck. - 6/17/2019										
1090/1:Exposed Rebar	sq.ft	58	0	0	0	0	100	58	0	0
Notes:The deck has concrete deterioration along both fascia beams, the deteriorated concrete is and has lost bond with reinforcing steel. The concrete between the south fascia girder has failed and there is 6 foot by 2 foot hole in the concrete deck. - 6/17/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	396	0	0	100	396	0	0	0	0
Notes:Deck is covered in 3in of gravel - 6/17/2019										
107/1:Steel Opn Girder/Beam	ft	240	50	119	37	88	0	0	14	33
1000/1:Corrosion	ft	5	0	0	0	0	0	0	100	5
Notes:South facial beam has areas of section loss in the center up to 1.5ft long - 6/17/2019										
1020/1:Connection	ft	58	0	0	52	30	0	0	48	28
Notes:South facial beam has areas of section loss in the center up to 1.5ft long - 6/17/2019										
1900/1:Distortion	ft	58	0	0	100	58	0	0	0	0
Notes:Facia beams are bowed. - 6/17/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protection is gone with rust on beams - 6/17/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
152/1:Steel Floor Beam	ft	16	0	0	100	16	0	0	0	0
1000/1:Corrosion	ft	16	0	0	100	16	0	0	0	0
Notes:Steel floor beams are rusting - 6/17/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating failed - 6/17/2019										
215/3:Re Conc Abutment	ft	36	0	0	89	32	11	4	0	0
1130/3:Cracking (RC and Other)	ft	36	0	0	89	32	11	4	0	0
Notes:Both abutments have cracking and deteriorated concrete - 6/17/2019										
331/1:Re Conc Bridge Railing	ft	59	0	0	0	0	0	0	100	59
1090/1:Exposed Rebar	ft	59	0	0	0	0	0	0	100	59
Notes:Concrete bridge rail has failed and no longer effective - 6/17/2019										
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes:We wingwall has deteriorated concrete with exposed rebar - 6/17/2019										

Remarks: NBI Remarks: No signing, railing or guardrail. Bottom 1/3 of abutments have been encased in concrete. Channel has moderate vegetation growth. Moderate erosion around wingwalls. No scour & no channel profile taken due to concrete floor in channel. SE wing has large piece of concrete missing with rebar exposed. County has closed the bridge per Local Govt. 3/2019. nmh As of 6/17/2019 structure is not closed. 8/19 Structure closed, photos in Filenet. cta

Alert Code 1: Deck & curbs have moderate spalling. Original portions of concrete abutments have moderate spalling. Outside girders are bowing out. - 6/17/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-117-22.0

Alert Code 2: The deck has concrete deterioration along both fascia beams, the deteriorated concrete is and has lost bond with reinforcing steel. - 6/17/2019

Alert Code 3: The concrete between the south fascia girder has failed and there is 6 foot by 2 foot hole in the concrete deck. Aaron Kelch has called the county rep and informed him of the current condition and sargent county was sending personel out to close the bridge. The structure was on Sargent's list for removal. - 6/17/2019

Critical FindingAs of 6/17/2019 structure is not closed. LG notified county 7/03/19

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-118-20.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Sargent	26 Functional	Rural, Major Collector
04 City	TAYLOR TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04120 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BR.OF WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 1 WEST OF HAVANAH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.819	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	45d 59' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	604542.9 5094200.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2005 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	36 Ft.	90 Date of Last Inspection	November 13, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	0.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	39.04 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRC-4120(054)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 12X7X58' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-118-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	117	73	85	27	32	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
1130/3:Cracking (RC and Other)	ft	27	0	0	100	27	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8402/1:Headwalls	each	1	100	1	0	0	0	0	0	0

Remarks: NBI Remarks: B&A markers all sides. Minor silt accumulation in boxes , S.end / w. box has vegetaion growing in the box .

Alert Code 1: Minor hairline cracked & spalled randomly in boxes , minor misalignment up to 1-1/4" ; separated up to 1-1/2"

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-124-18.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Sargent	26 Functional	Rural, Local
04 City	RUTLAND CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH OF RUTLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 01' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 30' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	615390.6 5097665.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2010 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	260 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 15, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	69.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CER-4125(061)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 12'X10'X70' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-124-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/2:Re Conc Culvert Precast	ft	140	79	110	21	30	0	0	0	0
1130/2:Cracking (RC and Other)	ft	30	0	0	100	30	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B & A end markers at all corners. minor cracking in the walls and roof

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-126-08.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Sargent	26 Functional	Rural, Major Collector
04 City	SHUMAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04129 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CROOKED CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 SOUTH 1 WEST MILNOR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.498	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 28' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	618053.2 5113737.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2		Railroad (live load for which structure was designated)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2013 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	55 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	13.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 20, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	22.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/21/2013
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CER-4125(062)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 10 X 6 74' PC RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-126-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	148	87	128	14	20	0	0	0	0
1130/3:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Structure is located on 86 Street SE / West of 140 AVE. 11/25/2013 - B & A end markers on all 4 corners.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-126-08.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Sargent	26 Functional	Rural, Major Collector
04 City	SHUMAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04129 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CROOKED CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 SOUTH 1 WEST MILNOR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.498	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 28' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	618291.3 5114164.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2013 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	55 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	13.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 20, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	22.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/21/2013
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CER-4125(062)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 10 X 6 X 74 PC RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-126-08.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	148	99	147	1	1	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Structure located on 140 AVE. 11/25/2013 - B & A end markers on all 4 corners. Spall in box 1 on the east side

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-127-08.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Sargent	26 Functional	Rural, Major Collector
04 City	SHUMAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04129 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CROOKED CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 SOUTH 1 EAST MILNOR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.498	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 10' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 27' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	618983.5 5113740.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2013 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	55 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	13.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 20, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/21/2013
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CER-4110(063)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 10 X 6 X 64' PC RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-127-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	128	100	128	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Structure located on 86 Street SE / East of 140 AVE. minor misalignment & separation.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-127-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Sargent	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 2 EAST OF RUTLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 00' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 27' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	619335.2 5095747.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2009 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 15, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.98 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-004(011)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10'X 10'X 48' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-127-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	96	100	96	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B/A at all corner , Minor misalignment of precast sections. Minor silt accumulation in boxes.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-130-12.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Sargent	26 Functional	Rural, Major Collector
04 City	SHUMAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04129 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH OF CAYUGA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.498	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 07' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 23' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	624836.1 5108389.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1984 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	160 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	13.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 15, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	37.07 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRS-4129(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok, Beavers
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 12X8X60' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-130-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	180	72	130	28	50	0	0	0	0
1130/3:Cracking (RC and Other)	ft	50	0	0	100	50	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: No signing or guardrail. Minor, random cracking throughout structure. Cracking and rust staining in parapet. 1 ft. sediment in boxes. .

Alert Code 1: Random transverse cracking in the roof of the two outside barrels.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-130-17.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Sargent	26 Functional	Rural, Major Collector
04 City	RANSOM TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04129 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH OF CAYUGA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.599	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 02' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 23' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625000.8 5100005.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	163 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	13.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 15, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	37.07 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBRS-4129(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 12X7X48' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-130-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	144	69	100	31	44	0	0	0	0
1130/3:Cracking (RC and Other)	ft	44	0	0	100	44	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: No signing or markers, Minor cracked on the headwalls.

Alert Code 1: North box 6-0" silt building up in the box, Vertical craking in the walls & bottoms of the boxes.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-132-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Sargent	26 Functional	Rural, Local
04 City	HERMAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 2 EAST OF CAYUGA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 08' 40.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	627981.6 5111444.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1999 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 09, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DPI-0036(005)411
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X12X80' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-132-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	161	94	151	6	10	0	0	0	0
1130/3:Cracking (RC and Other)	ft	15	0	0	100	15	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No signing. Minor spalling on wing walls. Random cracks in headwalls. Minor misalignment of wing wall sections.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-135-05.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Sargent	26 Functional	Rural, Local
04 City	HALL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3.5 SOUTH 3 EAST DELAMERE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 12' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 16' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	632652.4 5119347.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	November 20, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	02/17/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0041(012)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 12 X 11 X 56' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-135-05.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
245/3:Pre Concrete Culvert	ft	112	100	112	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Existing strucure has removed out of site , A double 12' x11'x 56' precast as replacment , which is have 24.7 feet in span . single B/A on 4 corners new slope protection & some work have been done to the chanel in 2016. Minor misalignment & separation 1-0" x 1-0" random at joint.

Alert Code 1: Minor misalignment & separation 1-0" x 1-0" random at joint.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-135-10.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Sargent	26 Functional	Rural, Major Collector
04 City	HERMAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04135 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILD RICE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 0.5 WEST GENESEO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	15.596	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 08' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 17' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	632015.1 5111438.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1984 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	11 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 20, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	37.07 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBRS-4135(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 12X8X48' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 41-135-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	144	90	130	10	14	0	0	0	0
1090/3:Exposed Rebar	ft	1	100	1	0	0	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	20	100	20	0	0	0	0	0	0
1130/3:Cracking (RC and Other)	ft	23	100	23	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: No signing or guardrail. Minor, random cracking throughout structure. East end / north wall of center box has rebar exposed , Rip rap slided cross the chanel . The SW wing has some minor erosion behind the wing wall

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-103-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Local
04 City	BUCKLIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	11.5 N 3 W OF MARMARTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 27' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 59' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	116530.5 5158027.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	20 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2010 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	75 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	October 05, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	44.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.98 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	FOH-05-01(001)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 10' X 7' X 66' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-103-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	132	100	132	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 6/18/2014 - NE corner eroded. SW corner badly eroded with boulders placed. 10-5-18- NE corner has ditch drainage into box end.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-103-12.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Local
04 City		37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CANNONBALL CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	11 N 3 W OF MARMARTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 27' 27.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	104d 00' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	115977.0 5157035.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2012 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	75 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	October 05, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	40.0 Ft.	Underwater	N
48 Length of Max Span	15 Ft.	Other Special	N
49 Structure Length	31.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	12/26/2012
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	N11-B68
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	0.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 15 X 15 X 48' PRCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-103-12.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	96	100	96	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 6/18/2014 - SW corner of box badly eroded with rocks placed. 10-5-18- West end vertical walls have developed some cracking possibly from ice damage.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-106-24.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	71.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Major Collector
04 City	BUCKLIN TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04405 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	SW OUTSKIRTS OF MARMARTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.800	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 17' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 56' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	119450.0 5138151.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel continuous	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	47 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	22 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	4 Tolerable
29 ADT	200 30 Year of ADT 2018	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	48 Miles	113 Scour Critical	3 SC - Unstable
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 04, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	76 Ft.	218 Channel Profile	1 48 05/29/2018
49 Structure Length	200.13 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	02/20/2013
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 44-106-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	5,145	81	4,145	19	1,000	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	200	0	0	100	200	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	500	0	0	100	500	0	0	0	0
1190/3:Abrasion(PSC/RC)	sq.ft	300	0	0	100	300	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	801	100	801	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	75	75	25	25	0	0	0	0
210/2:Re Conc Pier Wall	ft	49	100	49	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	49	100	49	0	0	0	0	0	0
313/2:Fixed Bearing	each	16	100	16	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	75	75	25	25	0	0	0	0
331/2:Re Conc Bridge Railing	ft	400	88	350	13	50	0	0	0	0
1090/2:Exposed Rebar	ft	50	0	0	100	50	0	0	0	0
7363/2:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
8398/2:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 9/5/2007 - Minor popouts, 30 to 40% of the deck has transverse cracking. 11/2010 - DECK HAS POPOUTS AND TRANSVERSE CRACKS ON SURFACE 1/8" MAX. MINOR HAIRLINE CRACKS ON ABUTMENTS & WINGS. NW end of bridge curb spalled and exposed rebar 11-16-2012. 6/18/2014 - SE bearing pad alligator cracked. Minor hairline cracking of pier walls 11-16-2012. 10-4-18-Many spalls and loose areas of concrete along bridge curb below rail.

Alert Code 1: 11/2010 - Some section loss on sw & nw bearing plate.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-108-23.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Major Collector
04 City	HUGHES TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04424 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTHEAST OF MARMARTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 18' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 53' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	123353.3 5139686.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	20 Ft.	Other Special	N
49 Structure Length	41.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/16/2016
	0.0 Ft.	213 Federal Aid Project Number	SC-4424(052)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
DOUBLE 14 X 10 X 63' PCRCB			

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-108-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	126	100	126	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10-4-18- South end has tree lodged in see pict.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-123-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WEST FORK DEEP CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 17 EAST MARMARTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 19' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 34' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	148184.4 5141186.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 35 63 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	3 SC - Unstable
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	62 Ft.	Other Special	N
49 Structure Length	65.94 Ft.	218 Channel Profile	1 48 05/25/2018
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	27.9 Ft.	213 Federal Aid Project Number	BRO-44(4)
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-123-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,981	100	1,981	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	259	100	259	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	131	100	131	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	95	95	0	0	5	5	0	0
3420/2:Peel/Bub/Crack(Stl Protect Co	sq.ft	5	0	0	0	0	100	5	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Rail on ne corner has been hit cracked concrete where post is bolted to deck. Checked all bolts on metal rail. 6/18/2014 - Erosion forming at N.W. corner of abutment. 10-4-18-Bridge end markers missing

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-126-11.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Major Collector
04 City	SAND CREEK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04417 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	10 WEST OF AMIDON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	22.995	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 28' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 31' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	152960.3 5156572.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1984 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	26 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	October 05, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	7 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBRS-4417(53)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 7X9X82' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-126-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	246	100	246	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Erosion started in ditch NW side Both ends have cracking where parapet and wing meet. Hairline cracking on SW & NW wings. 11/04/2008- North side has fence in barrel openings of box.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-127-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SAND CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 WEST 8 NORTH OF AMIDON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 35' 29.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 30' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	155222.3 5169593.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 08, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	25.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	44.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/17/2016
	0.0 Ft.	213 Federal Aid Project Number	N13-B154
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
TRIPLE 14 X 11 X 56' PCRCB			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-127-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	168	100	168	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/2016 - Bridge replaced with a box culvert.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-128-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Local
04 City	CASH TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DEEP CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	12 NORTH 22 EAST MARMARTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 19' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 28' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	156106.2 5139630.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1993 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-44(12)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X9X68' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-128-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	135	67	90	33	45	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	15	0	0	100	15	0	0	0	0
1130/2:Cracking (RC and Other)	ft	30	0	0	100	30	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Wingwalls and parapets developing many cracks. Minor cracks developing within structure.
 11/2010 - NE CORNER PARAPET DELAMINATED WITH LOOSE CONCRETE. 10-5-18-Bottom of east center wall broken. spalls developing at bottom of some of the crack in the walls.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-129-22.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Major Collector
04 City	CASH TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04424 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DEEP CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 N 2.5 W OF BOWMAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	27.994	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 18' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 27' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	157014.1 5138024.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 40 72 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 38 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1987 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 05/25/2018
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	28.5 Ft.	213 Federal Aid Project Number	RO-6(7) PLANS FROM THIS PROJ.
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 44-129-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	351	100	351	0	0	0	0	0	0
202/1:Steel Column	each	10	100	10	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3410/1:Chalk(Steel Protect Coatings)	sq.ft	100	0	0	100	100	0	0	0	0
219/1:Stl Abutment	ft	56	100	56	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
231/1:Steel Pier Cap	ft	56	100	56	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3410/1:Chalk(Steel Protect Coatings)	sq.ft	100	0	0	100	100	0	0	0	0
330/1:Metal Bridge Railing	ft	98	100	98	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	75	75	25	25	0	0	0	0
3410/1:Chalk(Steel Protect Coatings)	sq.ft	75	100	75	0	0	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	25	0	0	100	25	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 1/25/2007 - Riprap on both sides under bridge.**Alert Code 1:** 11/14/2012 - METAL ABUTMENTS STARTING TO SEPARATE AWAY FROM ENDS OF CONCRETE BRIDGE DECK, CAUSING A 1" GAP INBETWEEN THEM.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-130-10.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Major Collector
04 City	SAND CREEK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04417 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SAND CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST OF AMIDON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	27.394	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 28' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 25' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	159763.3 5157182.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	18 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 05, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.0 Ft.	Underwater	N
48 Length of Max Span	9 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBRS-4417(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 9X9X108' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-130-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	325	100	325	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Riprap around box ends and inslopes. Hairline cracking SE wingwall. Erosion started in SW ditch outside riprap area. 11/2010 - CRACK AT MIDPOINT OF NE WING IS A VERTICAL CRACK. MINOR HAIRLINE CRACKING SW INNER WALL.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-142-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Local
04 City	WHITE LAKE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	↓ FORK CANNONBALL RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST OF AMIDON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 28' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 10' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	179499.0 5156140.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1992 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	25.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-44(14)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 11X11X58' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 44-142-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	115	91	105	9	10	0	0	0	0
1130/2:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Tie bar at bottom of box are rusting causing hairline cracking to the top. NE wing has hairline cracks. 6/17/2014 - All wings are cracked and diiscolored near the bottom.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-147-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Local
04 City	WOODBERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N. FORK CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8 SOUTH 12 EAST AMIDON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 21' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 04' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	186793.7 5142100.2	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	26 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	23.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/17/2016
	0.0 Ft.	213 Federal Aid Project Number	N13-B152
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
DOUBLE 11 X 8 X 52' PCRCB			

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SEC 409

Structure Number: 44-147-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	104	100	104	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/2016 - Bridge replaced with a pre-cast box culvert.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-147-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Local
04 City	WOODBERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NORTH FORK CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	11 SOUTH 12 EAST AMIDON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 19' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 04' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	186638.3 5138371.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 33 61 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1993 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	26 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	36 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	1 48 05/24/2018
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.5 Ft.	213 Federal Aid Project Number	BRO-44(15)
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Structure Number: 44-147-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,227	100	1,227	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	151	100	151	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
310/3:Elastomeric Bearing	each	8	100	8	0	0	0	0	0	0
330/3:Metal Bridge Railing	ft	79	100	79	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: One anchor bolt on bridge railing too low. 6/20/2014 - Minor cracks with efflorescent staining on underside of deck. .

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-148-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Local
04 City	WOODBERRY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N. FORK CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 SOUTH 12 EAST OF AMIDON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 21' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 03' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	187331.3 5141220.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1995 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DPI 0036(001)441
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X8X58' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-148-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	115	100	115	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-149-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Local
04 City	EDAR CREEK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N. FORK CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	10 SOUTH 14 EAST AMIDON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 20' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 01' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	189857.8 5139141.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 27 49 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	7 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.6 Ft.	Underwater	N
48 Length of Max Span	56 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 05/24/2018
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	BRO-44(9)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-149-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,841	100	1,841	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	233	100	233	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
310/3:Elastomeric Bearing	each	8	100	8	0	0	0	0	0	0
330/3:Metal Bridge Railing	ft	121	100	121	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3410/3:Chalk(Steel Protect Coatings)	sq.ft	100	0	0	100	100	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Deck width 30.6. Riprap placed by each abutment. 11/2010 - CRACK on abutment UNDER 2ND and 3rd BOX BEAM GIRDER FROM WEST LONGITUDINAL FULL LENGTH.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-151-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Local
04 City	CARROLL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CHANTA PETA CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 SOUTH 16 EAST OF AMIDON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 24' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 59' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	193440.7 5146844.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	4 Load Testing
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	208 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	26 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	October 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	15 Ft.	Other Special	N
49 Structure Length	31.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/17/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	N13-B153
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 15 X 5 X 44' PCRCB		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-151-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	88	100	88	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/2016 - Bridge replaced with a box culvert.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-151-21.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Major Collector
04 City	EDAR CREEK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04422 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NORTH FORK CEDAR CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	11 SOUTH 15 EAST AMIDON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.399	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 19' 27.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 59' 60.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	192101.3 5137832.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 34 62 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	0.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	56 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 05/24/2018
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.5 Ft.	213 Federal Aid Project Number	BRO-44(10)
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-151-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,830	100	1,830	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	233	100	233	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
310/3:Elastomeric Bearing	each	8	100	8	0	0	0	0	0	0
330/3:Metal Bridge Railing	ft	121	100	121	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	90	90	0	0	0	0	10	10
3420/3:Peel/Bub/Crack(Stl Protect Co	sq.ft	100	90	90	0	0	0	0	10	10
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-152-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RIB OF CANNONBALL RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 16 EAST AMIDON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 33' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 59' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	194511.3 5163453.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2000 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 11, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	HCO-44(18)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X4X48' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 44-152-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	95	100	95	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Some sections are seperated 1/4-1/2", no backfill loss. 6/17/2014 - One small pile of backfill loss west barrel.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-153-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Local
04 City	CARROLL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CHANTA PETA CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 SOUTH 18 EAST OF AMIDON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 22' 60.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 56' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	196569.2 5144207.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 34 62 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1985 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 10, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	62 Ft.	Other Special	N
49 Structure Length	65.94 Ft.	218 Channel Profile	1 48 05/24/2018
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.5 Ft.	213 Federal Aid Project Number	BRO-44(8)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-153-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,207	100	2,207	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	256	100	256	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	59	100	59	0	0	0	0	0	0
310/3:Elastomeric Bearing	each	8	100	8	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	131	100	131	0	0	0	0	0	0
8398/2:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Riprap both abutments and channel bottom. 11/03/2008 - Minor erosion in NE ditch.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-154-05.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Slope	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RIB OF CANNONBALL RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 19 EAST AMIDON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 33' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 55' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	198645.0 5163245.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2000 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 11, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	22.97 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	HEO-44(18)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
DOUBLE, 11X9X60' PRECAST RCB			

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 44-154-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	121	100	121	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Approximately 1' of sediment in southwest barrel end. Some sections pulled apart 1/4"-1/2",no backfill loss. Spall on inner wing wall north side 9"x6". 10-11-18-Spall on east outer wall north end with small amount of exposed steel grid.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-101-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	40.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 1 WEST BELFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 12' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	179338.6 5203429.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 12 22 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 7 14 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	206 Gravel/Dirt	209 Posted in "Tons"	18 Tons
Age and Service		Appraisal	
27 Yr Built	1945 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 14, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	18.0 Ft.	Other Special	N
48 Length of Max Span	20 Ft.	218 Channel Profile	1 48 05/30/2017
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	02/16/2017
51 Bridge Rdwy Width - Curb to Curb	18.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	19.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 45-101-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	463	0	0	100	463	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	194	90	174	10	20	0	0	0	0
1000/2:Corrosion	ft	20	0	0	100	20	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
202/3:Steel Column	each	10	0	0	0	0	100	10	0	0
1000/3:Corrosion	each	10	0	0	0	0	100	10	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	50	50	50	50	0	0
3430/3:Ox Flm/Txt Adhr(Stl Prot Coat)	sq.ft	100	0	0	50	50	50	50	0	0
216/3:Timber Abutment	ft	36	0	0	100	36	0	0	0	0
231/2:Steel Pier Cap	ft	36	72	26	28	10	0	0	0	0
1000/2:Corrosion	ft	10	0	0	100	10	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
332/2:Timb Bridge Railing	ft	49	0	0	0	0	0	0	100	49
7363/1:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: Seven piling are rusting at bottom showing section loss of 1/32". NBI Remarks: Curb loose on east side. One section missing. Piling on wings bent. Some have been cut off on top where pile were bent from wipe loads plank on wings loose three pile have section loss. Pile with section loss have been welded on existing pile. Nw wing has one piling completely down. 6/12/2012 Minor erosion on backside of SW abutment due to wing being too short. 6/12/2012 Three piles have more significant section loss these have welds connecting the extensions. 7/15/2013- SCOUR HOLE UNDER STRUCTURE IN SW CORNER. SW WING NEEDS REPAIRS.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-101-07.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	39.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HEART RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 2 NORTH BELFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 12' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	179374.1 5204054.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 11 20 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 6 12 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	204 Gravel/Dirt	209 Posted in "Tons"	11 Tons
Age and Service		Appraisal	
27 Yr Built	1951 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	3 Intolerable - Correct
29 ADT	25 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 14, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.7 Ft.	Other Special	N
48 Length of Max Span	31 Ft.	218 Channel Profile	1 48 05/30/2017
49 Structure Length	33.14 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	02/16/2017
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 45-101-07.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	603	0	0	0	0	100	603	0	0
107/2:Steel Opn Girder/Beam	ft	299	67	200	33	99	0	0	0	0
1000/2:Corrosion	ft	99	0	0	100	99	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
202/3:Steel Column	each	10	0	0	100	10	0	0	0	0
1000/3:Corrosion	each	10	0	0	100	10	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
216/3:Timber Abutment	ft	36	100	36	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	36	100	36	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	66	0	0	70	46	0	0	30	20
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 9/4/2007 - No rail on structure NBI Remarks: 11/2010 - FENCE ON EAST SIDE OF BRIDGE COLLECTING DEBRIS AND RESTRICTING WATERWAY. 7/15/2013 - TREES SHOULD BE REMOVED. DEBRIS COLLECTING EAST OF STRUCTURE PANALS HOLDING DEBRIS 11/25/14 - East outside Beam slightly bowed away from structure. 12/09/2015 - Abutments and wings repaired. All other problems from 2014 inspection have been repaired. Bridge is open.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-101-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	49.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NORWEGIAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 1 WEST BELFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 12' 40.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	178919.4 5195939.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 9 17 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 6 12 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	09 Tons
Age and Service		Appraisal	
27 Yr Built	1971 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	24 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 12, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	32 Ft.	218 Channel Profile	1 48 05/30/2017
49 Structure Length	35.10 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	08/16/2018
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lutes, Martin
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-101-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	850	100	850	0	0	0	0	0	0
111/2:Timber Open Girder	ft	210	84	176	16	34	0	0	0	0
206/3:Timber Column	each	12	100	12	0	0	0	0	0	0
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	69	0	0	96	66	0	0	4	3
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Embankment by abutments has eroded away. Both outside beams are weather cracked. Cracks are 1" to 1 1/2" deep. Caps are also weather cracked. Minor section loss of vertical deck planks. South abutment piles are leaning east 3-4". North wing walls are severely eroded by abutments. South wing walls slightly eroded.
7/15/2013 - SCOUR HOLE SE CORNER

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-102-08.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Major Collector
04 City	BELFIELD CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 04510 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HEART RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6TH AVE WEST IN BELFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.500	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 27.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 11' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 180093.2 5201581.5		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type 1 Concrete-Cast-in-Place		64 Oper. Rating HS 28	51 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating HS 13	25 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden 206	Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built 1927 106 Yr Reconstructed 1937		67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT 400 30 Year of ADT 2018		72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 14, 2018
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	30.2 Ft.	Other Special	N
48 Length of Max Span	42 Ft.	218 Channel Profile	1 48 05/30/2017
49 Structure Length	43.96 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	30.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 45-102-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,432	100	1,432	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	1,432	100	1,432	0	0	0	0	0	0
110/2:Re Conc Opn Girder/Beam	ft	351	76	267	21	74	3	10	0	0
1090/2:Exposed Rebar	ft	10	0	0	0	0	100	10	0	0
1120/2:Efflorescence/Rust Staining	ft	74	0	0	100	74	0	0	0	0
215/3:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	89	0	0	65	58	35	31	0	0
1080/2:Delamination/Spall/Patched Area	ft	31	0	0	0	0	100	31	0	0
1090/2:Exposed Rebar	ft	58	0	0	100	58	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Concrete deck overlaid with asphalt. NBI Remarks: Collision damage to rail and post southeast corner. Some spalling on entire rail. Exposed rebar on north and south bridge railing. Exposed rebar and minor spalling on 2nd beam from the north. Efflorescence staining on 2nd and 7th beam from the north. Minor spalling under deck. 6/12/12 Embankment erosion along NE wing on upstream side. Caused by culvert draining into NE corner. 6/12/12 A strip of concrete is falling out from between deck and beam # 7. 7/15/2013 - HEAVILY WOODED. EROSION NE CORNER FROM DITCH RUN OFF. NORTH SIDE DEBRIS IS COLLECTED. RIP RAP IN PLACE NE WING DECK DRAINS NEED TO BE CLEANED. NEW PAVEMENT OVER STRUCTURE.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-102-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	52.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	BELFIELD CITY	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HEART RIVER	102 Direction of Traffic	2 2-way traffic
09 Location 2ND AVE & 2ND ST NW-BELFI		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 11' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 180145.8 5201351.4		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating HS 15	28 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating HS 9	17 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden 1	None	209 Posted in "Tons"	12 Tons
Age and Service		Appraisal	
27 Yr Built 1930 106 Yr Reconstructed 1974		67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	3 Intolerable - Correct
29 ADT 40 30 Year of ADT 2018		72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	1 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 14, 2018
32 Approach Roadway Width	50 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 05/30/2017
49 Structure Length	32.15 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	3.9 Ft Lt-Side	212 Structure Load Rated	02/16/2017
51 Bridge Rdwy Width - Curb to Curb		213 Federal Aid Project Number	
	24.0 Ft.	214 Delayed Inspection	Not Applicable
52 Deck Width	24.0 Ft.	216 Inspector	Lutes
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	Navigation Data	
54 Min Vert Underclearance	0 Ft. 0 In.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
55 Min Lateral UnderClear. - Rt	99.9 Ft.	40 Navigation Horizontal Clearance	0 Ft.
	N Feature not hwy or RR	111 Pier or Abutment Protection	Unknown (NBI)
56 Min Lateral UnderClear. - Lt	0.0 Ft.	116 Minimum Navigation Vertical Clearance	Ft.
210 Culvert / 211 Description			

Structure Number: 45-102-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	891	0	0	100	891	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	417	89	369	12	48	0	0	0	0
1900/2:Distortion	ft	48	0	0	100	48	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
215/3:Re Conc Abutment	ft	49	0	0	39	19	61	30	0	0
1080/3:Delamination/Spall/Patched Area	ft	19	0	0	100	19	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	30	0	0	0	0	100	30	0	0
330/2:Metal Bridge Railing	ft	66	100	66	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	0	0	100	4	0	0
1080/3:Delamination/Spall/Patched Area	each	2	0	0	0	0	100	2	0	0
1130/3:Cracking (RC and Other)	each	2	0	0	0	0	100	2	0	0

Remarks: NBI Remarks: Top of wing walls beginning to spall away. East abutment has a 10" x 2.5" spall at the NE corner. Gas line running along north side of bridge. Minor cracking and concrete deterioration on abutment walls. 6/12/12 Embankment erosion along NW wing upstream side to streambed. 6/12/12 NE corner of guardrail has broken post. 6/12/12 Roadway has double layer deck. Walkway has single layer deck. 7/15/2013 - MODERATE EROSION ON NW WING WALL. CHANNEL IS HEAVILY WOODED UP & DOWN STREAM. 12/2/14 West abutment is pushing out at top either side of large vertical crack. 12/2/14 Delamination & deterioration of west abutment at high water line approx. 1' wide. 12/2/14 Tops of all wings deteriorating with concrete falling off.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 45-102-09.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	BELFIELD CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HEART RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3RD STREET NE BELFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 11' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 180291.9 5201081.3		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 39
208 Dk Overburden	1	70 Bridge Posting	5 At/Above Legal Loads
	None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built 1988 106 Yr Reconstructed	-1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT 1,300 30 Year of ADT	2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	5.00	36 Traffic Safety Features	1 0 0 0
19 Bypass, Detour Length	1 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 14, 2018
32 Approach Roadway Width	30 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	20.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	30.2 Ft.	Other Special	N
48 Length of Max Span	64 Ft.	218 Channel Profile	1 48
49 Structure Length	67.91 Ft.	Chaining Date	05/30/2017
50 Curb/Sidewalk Widths	5.2 Ft Rt-Side	207 Transporter Erector Routes and Sites	None
	0.0 Ft Lt-Side	212 Structure Load Rated	-1
51 Bridge Rdwy Width - Curb to Curb		213 Federal Aid Project Number	01/01/1901
	30.2 Ft.	214 Delayed Inspection	BRO-45(13)
52 Deck Width	38.7 Ft.	216 Inspector	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.		Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-102-09.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,637	100	2,637	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	341	100	341	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	79	100	79	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	135	100	135	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	135	100	135	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: 3/27/2007 NE corner sidewalk rail settling. Storm sewer pipes north side eroded out at ends. Efflorescence staining under deck. Some hairline cracks on deck. Utility line running on outside bridge railing south side. Minor cracking on bridge railing.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-102-09.3

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	75.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	BELFIELD CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HEART RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	MAIN STREET IN BELFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 12' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 179972.8 5201144.8		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 32
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 14
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden 1	None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built 1967 106 Yr Reconstructed	-1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT 1,800 30 Year of ADT 2018		72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	3.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	1 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 14, 2018
32 Approach Roadway Width	50 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.2 Ft.	Other Special	N
48 Length of Max Span	59 Ft.	218 Channel Profile	1 48
49 Structure Length	60.04 Ft.	Chaining Date	05/30/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	None
	4.3 Ft Lt-Side	212 Structure Load Rated	-1
51 Bridge Rdwy Width - Curb to Curb		213 Federal Aid Project Number	01/01/1901
	28.2 Ft.	214 Delayed Inspection	Not Applicable
52 Deck Width	31.5 Ft.	216 Inspector	Lutes
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	Navigation Data	
54 Min Vert Underclearance	0 Ft. 0 In.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
55 Min Lateral UnderClear. - Rt	99.9 Ft.	40 Navigation Horizontal Clearance	0 Ft.
	N Feature not hwy or RR	111 Pier or Abutment Protection	Unknown (NBI)
56 Min Lateral UnderClear. - Lt	0.0 Ft.	116 Minimum Navigation Vertical Clearance	-1 Ft.
210 Culvert / 211 Description			

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-102-09.3

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	659	100	659	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	85	94	80	0	0	6	5	0	0
1090/2:Exposed Rebar	ft	5	0	0	0	0	100	5	0	0
330/2:Metal Bridge Railing	ft	121	100	121	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	121	100	121	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: 2 1/2' x 3' spall on NE corner of abutment under outside beam with exposed rebar. 5 inch natural gas line attached to bottom of beam. 2 1/2" x 3" spalls, 2" deep on north abutment.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-103-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NORWEGIAN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 1 WEST BELFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 50' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 12' 40.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	181368.2 5196670.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	June 12, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	23.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/26/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	COIA-0045(055)
53 Min Vert Clear. Over Bridge	99 Ft. 11 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Lutes, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	0.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 11 X 8 X 52' PCBC		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-103-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	104	100	104	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: _6-12-18- debris in S end box, erosion SE corner box. took pictures, #14-alignment west, #15-alignment east, #16-elevation north east.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-104-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HEART RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST BELFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 52' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 09' 07.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	183628.0 5199787.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 18 33 Tons
208 Dk Overburden	202 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 14, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	66 Ft.	Other Special	N
49 Structure Length	69.88 Ft.	218 Channel Profile	1 48 05/31/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	33.1 Ft.	213 Federal Aid Project Number	BRO-45(7)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-104-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,325	100	2,325	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	279	100	279	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	141	100	141	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 02/09/2009 - Large dead trees in channel. NBI Remarks: Small spalls on east bottom edge of diaphragms. Large deposits of debris blocking channel.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-105-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Applicable	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HEART RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST BELFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 52' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 07' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	185560.8 5199560.7	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	26 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	9 Above Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	November 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	20 Ft.	Other Special	N
49 Structure Length	20.17 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Martin, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
Single 22'x10' Precast RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-105-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	56	100	56	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: 11.13.19 - New box culvert, no defects found at inspection. - 11/13/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-106-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SOUTH BRANCH HEART RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 7 SOUTH BELFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 47' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 06' 24.00"	112 NBIS Bridge Length	No
GPS Coordinates XY	186568.6 5189946.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2017 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 12, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	20 Ft.	Other Special	N
49 Structure Length	20.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	10/13/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBP-0045(16)01
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Martin, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
SINGLE 20 X 12 X 88' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-106-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	88	100	88	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10/18/17 - New structure 2017. 6-12-18- due to heavy rain washout s-side box on bank, took pictures-#8-alignment looking west, #9-alignment looking east, #10-align look north east, #11- elevation looking SW, #12- alignment looking NE/ debris on riprap of box SE, #13- pict of washout on embankment S-side box.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-118-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	Creek	102 Direction of Traffic	2 2-way traffic
09 Location	10 South 3 West Dickinson	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 42' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 51' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	205634.8 5180853.4	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 9 17 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 8 15 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	15 Tons
27 Yr Built	1901 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	17 Ft.	90 Date of Last Inspection	August 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.9 Ft.	Underwater	N
48 Length of Max Span	26 Ft.	Other Special	N
49 Structure Length	31.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.5 Ft Rt-Side	Chaining Date	None
	0.5 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	17.0 Ft.	212 Structure Load Rated	08/30/2019
52 Deck Width	17.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Brown, Abdelmokarm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	0.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
		116 Minimum Navigation Vertical Clearance	0 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-118-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	555	73	405	27	150	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	150	0	0	100	150	0	0	0	0
Notes:Timber deck showing signs of decay / section loss. - 8/23/2019										
113/1:Steel Stringer	ft	279	0	0	78	217	22	62	0	0
Notes:Seems to be weathering steel. - 8/23/2019										
1000/1:Corrosion	ft	217	0	0	100	217	0	0	0	0
Notes:Entire structure showing signs of corrosion - 8/23/2019										
1900/1:Distortion	ft	62	0	0	0	0	100	62	0	0
Notes:Both outside stringers are distorted from possible ice damage. - 8/23/2019										
215/1:Re Conc Abutment	ft	40	0	0	10	4	90	36	0	0
1080/1:Delamination/Spall/Patched Area	ft	20	0	0	0	0	100	20	0	0
Notes:Multiple area's of spalling on both abutments along with delamination. - 8/23/2019										
1130/1:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:Both abutments have various areas of cracking, see photos. - 8/23/2019										
6000/1:Scour	ft	16	0	0	0	0	100	16	0	0
Notes:North abutment is scoured down to the footing. - 8/23/2019										
330/1:Metal Bridge Railing	ft	62	0	0	0	0	0	0	100	62
1900/1:Distortion	ft	31	0	0	0	0	0	0	100	31
Notes:West rail is distorted from damage, pushed out and away from the bridge. - 8/23/2019										
7000/1:Damage	ft	31	0	0	0	0	0	0	100	31
Notes:East rail is missing. - 8/23/2019										
332/1:Timb Bridge Railing	ft	62	0	0	100	62	0	0	0	0
Notes:Timber curbing / rail both sides of the structure. - 8/23/2019										
1140/1:Decay/Section Loss	ft	62	0	0	100	62	0	0	0	0
Notes:Entire timber curbing is decaying or has section loss. - 8/23/2019										
8401/1:Wings	each	4	0	0	0	0	75	3	25	1
1080/1:Delamination/Spall/Patched Area	each	3	0	0	0	0	100	3	0	0
Notes:SW, NW, & NE wings are all delaminated with various spalls - 8/23/2019										
7000/1:Damage	each	1	0	0	0	0	0	0	100	1
Notes:A large chunk is missing on the SW wing (impact damage?) - 8/23/2019										

Remarks: 8/23/19 - all defects noted under their category. Section line dead ends in a pasture on the North side of the structure. Added timber railing for the curb on the structure. - 8/23/2019

Alert Code 2: 8/23/19 - scouring at the north abutment that is exposing the footing of the structure. - 8/23/2019

Structure Number: 45-120-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GREEN RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 NORTH 1 WEST DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 48' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	210087.0 5207995.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 48 88 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 20 36 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	September 20, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	80 Ft.	Other Special	N
49 Structure Length	80.00 Ft.	218 Channel Profile	1 48 06/14/2017
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/29/2016
	28.0 Ft.	213 Federal Aid Project Number	BRO-0045(060)
52 Deck Width	30.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-120-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	2,400	100	2,400	0	0	0	0	0	0
Notes: _										
104/3:Pre Clsd Box Girder	ft	400	100	400	0	0	0	0	0	0
Notes: _										
215/3:Re Conc Abutment	ft	94	100	94	0	0	0	0	0	0
Notes: _										
313/1:Fixed Bearing	each	10	100	10	0	0	0	0	0	0
Notes: _										
330/2:Metal Bridge Railing	ft	160	100	160	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 9/20/2016 - This stucture replaced with 28 foot by 80 foot single span bridge.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-123-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GREEN RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 NORTH 2 EAST DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 44' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	214918.2 5208061.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 31 57 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 19 34 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	15 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	August 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	36 Ft.	Other Special	N
49 Structure Length	108.00 Ft.	218 Channel Profile	1 48 01/01/2000
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	10/11/2018
	28.0 Ft.	213 Federal Aid Project Number	CBP-0045(16)02
52 Deck Width	30.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Brown, Abdelmokarm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	2 In-Place, Functioning
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-123-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,240	100	3,240	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	432	100	432	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	58	98	57	2	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Small spall on north side of pier 1, east end. - 8/23/2019										
215/3:Re Conc Abutment	ft	60	100	60	0	0	0	0	0	0
313/1:Fixed Bearing	each	16	100	16	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	216	100	216	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
6000/3:Scour	each	4	0	0	100	4	0	0	0	0
Notes:Scouring and erosion behind all 4 wings. - 8/23/2019										

Remarks: 9/2018 - Structure replaced with new bridge. 8/23/19 - defects noted on elements. - 8/23/2019**Alert Code 1:** 8/23/19 - Scouring behind all wings. - 8/23/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-123-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ANTELOPE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 SOUTH 2 EAST DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 46' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 44' 52.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	213919.9 5187400.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 34 62 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 31 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1971 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	15 30 Year of ADT 2018	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	0 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 19, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	1 48 07/20/2017
49 Structure Length	36.09 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Eslinger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 45-123-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	89	98	87	2	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
202/3:Steel Column	each	12	0	0	83	10	17	2	0	0
1000/3:Corrosion	each	10	0	0	100	10	0	0	0	0
7000/3:Damage	each	2	0	0	0	0	100	2	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/3:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	52	0	0	100	52	0	0	0	0
1000/2:Corrosion	ft	52	0	0	100	52	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
330/2:Metal Bridge Railing	ft	72	100	72	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3410/2:Chalk(Steel Protect Coatings)	sq.ft	100	0	0	100	100	0	0	0	0
331/2:Re Conc Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8399/3:Slope Protection, RC	each	2	0	0	0	0	0	0	100	2
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Concrete slope protection under bridge is all broken up. 11/2010 - SLOPE PROTECTION HAS DENTED SOME OF THE COLUMNS.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-125-10.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	68.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04512 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HEART RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 1 SOUTH DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.100	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 52' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 42' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	217412.3 5197430.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 34 62 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 30 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1962 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	450 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	3 SC - Unstable
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 21, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	55 Ft.	218 Channel Profile	1 48 07/25/2017
49 Structure Length	154.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb		213 Federal Aid Project Number	CS-460(2)
	24.0 Ft.	214 Delayed Inspection	Not Applicable
52 Deck Width	29.2 Ft.	216 Inspector	Brown, Eslinger
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	Navigation Data	
54 Min Vert Underclearance	0 Ft. 0 In.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
55 Min Lateral UnderClear. - Rt	99.9 Ft.	40 Navigation Horizontal Clearance	0 Ft.
	N Feature not hwy or RR	111 Pier or Abutment Protection	Unknown (NBI)
56 Min Lateral UnderClear. - Lt	0.0 Ft.	116 Minimum Navigation Vertical Clearance	-1 Ft.
210 Culvert / 211 Description			

Structure Number: 45-125-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	1,394	96	1,340	4	54	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	54	0	0	100	54	0	0	0	0
210/3:Re Conc Pier Wall	ft	59	76	45	10	6	14	8	0	0
1090/3:Exposed Rebar	ft	6	0	0	100	6	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	8	0	0	0	0	100	8	0	0
215/2:Re Conc Abutment	ft	59	90	53	10	6	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	6	0	0	150	6	0	0	0	0
331/2:Re Conc Bridge Railing	ft	308	95	292	3	10	2	6	0	0
1080/2:Delamination/Spall/Patched Area	ft	5	0	0	50	5	0	0	0	0
1090/2:Exposed Rebar	ft	6	0	0	0	0	100	6	0	0
1130/2:Cracking (RC and Other)	ft	5	0	0	50	5	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
1080/2:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0

Remarks: NBI Remarks: East abut spalled and cracked outside of rail area. Segregated concrete spotting the face of east abut. 11/2010 - FIRST 2 RAIL POSTS WEST END SOUTH, HAVE TRAFFIC DAMAGE. 11/20/14 Spall on south outside midspan beam at pier #2 with separation between this beam and adjoining one to west.one

Alert Code 2: Major spall with rebar showing on pier 2 under beam on the north and south side and pier 3 north side.Grout on joints at pier is starting to spall and deteriorate.6/19/2012 Grout between beams deteriorating, letting water through at ends of bridge and over piers, along with beams 1 and 2.6/19/2012 West end box beam mid span second from south side has been patched with asphalt.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-125-15.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04525 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ANTELOPE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 6 SOUTH DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 47' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 42' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	217111.2 5188621.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 31 57 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1994 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	80 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	102.03 Ft.	218 Channel Profile	1 48 07/25/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	31.2 Ft.	213 Federal Aid Project Number	BRO-45(1)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Eslinger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-125-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,167	100	3,167	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	407	100	407	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	62	100	62	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	203	100	203	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	203	100	203	0	0	0	0	0	0
8398/1:Slope Protection	each	1	0	0	100	1	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: All the anchor bolts on the t-11 railing checked okay.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-126-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	56.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSSIAN SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 6 NORTH DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 58' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 41' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	218718.7 5209727.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 9 16 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 6 11 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	15 30 Year of ADT 2018	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 21, 2018
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 06/14/2017
49 Structure Length	33.14 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Eslinger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 45-126-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	797	100	797	0	0	0	0	0	0
111/2:Timber Open Girder	ft	364	100	364	0	0	0	0	0	0
206/3:Timber Column	each	12	92	11	0	0	8	1	0	0
1160/3:Crack (Timber)	each	1	0	0	0	0	100	1	0	0
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	66	77	51	0	0	23	15	0	0
1170/2:Split/Delamination (Timber)	ft	15	0	0	0	0	100	15	0	0
8398/3:Slope Protection	each	2	0	0	0	0	0	0	100	2
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Deck stringers have approximately 1 1/2" sag. NBI Remarks: 6/18/2012 Minor damage to two pile in west abutment. 6/18/2012 Minor cracks with slivers on 2nd and 3rd girder from south. 7/16/2013 - NO CHANGE. SCOUR HOLE NE ABUTMENT AND WING WALL. 9/15/2016 - 4th column north east side has stress crack at front from bowing. Timber curb cannot be seen due to gravel build up at edge of bridge. 9/15/2016 - There is some decay of bottom of columns and backwall below normal water line. Cross brace bolted to girders to hold them parrallel has 5 loose bolts.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-127-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GREEN RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 4 NORTH DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 40' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	219835.9 5206006.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 36 65 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2013 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	150 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	30.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 21, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	112.00 Ft.	218 Channel Profile	1 48 07/20/2017
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/10/2014
	28.0 Ft.	213 Federal Aid Project Number	BRO-0045(042)
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Eslinger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-127-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,416	100	3,416	0	0	0	0	0	0
520/1:Conc Re Prot Sys	sq.ft	3,416	100	3,416	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	448	100	448	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	61	100	61	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	61	100	61	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	224	100	224	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/19/14 Bridge rail is double box beam covered by a piece of guardrail. 9/15/2016 - East end of bridge has erosion behind and around wing. County using sand bags to divert runoff onto bridge then down into riprap. 9-21-18- SW guardrail end section damaged & 3 blocks near retrofit area.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-127-04.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RUSSIAN SPRING CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 4 NORTH DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 40' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	220383.5 5205978.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 28 51 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 13 24 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1970 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	50 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	8 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 21, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	43 Ft.	218 Channel Profile	1 48 06/14/2017
49 Structure Length	44.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Eslinger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 45-127-04.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	361	75	271	25	90	0	0	0	0
1120/1:Efflorescence/Rust Staining	ft	90	0	0	100	90	0	0	0	0
215/3:Re Conc Abutment	ft	49	80	39	20	10	0	0	0	0
1130/3:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
330/2:Metal Bridge Railing	ft	89	100	89	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	89	100	89	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
1130/3:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0

Remarks: NBI Remarks: Cracks and efflorescent staining on both outside beams. 11/2010 - All wings and abutments have hairline cracks. 6/18/2012 SE wing has map cracking which is extending under the bridge to the east abutment wall. 6/18/2012 Fence across channel under bridge north and south side. 7/16/2013 - SCOUR HOLE NW ABUTMENT + WING.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-127-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GREEN RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 3 NORTH DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 39' 52.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	221049.4 5203436.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	41 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	25 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1954 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	80 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 21, 2018
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.0 Ft.	Other Special	N
48 Length of Max Span	84 Ft.	218 Channel Profile	1 48 07/20/2017
49 Structure Length	86.94 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	02/17/2017
51 Bridge Rdwy Width - Curb to Curb	19.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Eslinger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 45-127-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,744	95	1,657	5	87	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	87	0	0	100	87	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	348	0	0	100	348	0	0	0	0
1000/2:Corrosion	ft	348	0	0	100	348	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
215/2:Re Conc Abutment	ft	39	62	24	26	10	13	5	0	0
1080/2:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
1090/2:Exposed Rebar	ft	5	0	0	0	0	100	5	0	0
330/2:Metal Bridge Railing	ft	174	0	0	100	174	0	0	0	0
1000/2:Corrosion	ft	174	0	0	100	174	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Narrow bridge signs are up. Girders have a slight bow down. Spalls on back wall along beams. Some steel exposed on north abutment. 11/2010 - One section of corrugated steel sheeting under deck is distorted. Numerous cracks on bridge deck.

Alert Code 2: 11/2010 - APPROX. 1/4" CRACK ON SW WING AND SPALLING with rebar.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-127-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ANTELOPE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 6 SOUTH DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 47' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 40' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	219042.7 5188346.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1998 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	15 30 Year of ADT 2019	71 Waterway Adequacy	4 Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	June 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.7 Ft.	Underwater	N
48 Length of Max Span	17 Ft.	Other Special	N
49 Structure Length	35.10 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DPI-0036(004)452
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Martin, Yusuf
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X10X44' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 45-127-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	89	88	78	12	11	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:spalls on parapet used as curb. - 6/24/2019										
1120/3:Efflorescence/Rust Staining	ft	4	0	0	100	4	0	0	0	0
Notes:staining at cracked locations. - 6/24/2019										
1130/3:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:Cracking intermittently throughout box on walls and roof. - 6/24/2019										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
Notes:Cracking and staining on NE, NW, - 6/24/2019										
6000/3:Scour	each	2	0	0	100	2	0	0	0	0
Notes:Erosion behind NE, NW and SE. - 6/24/2019										

Remarks: NBI Remarks: Signed for flood area. Do not cross when flooded. Minor cracks on walls and roof of box.
 Efflorescence staining on roof. 11/2010 - MINOR CRACKS ON WINGS WITH EFFLORESCENT STAINING.
 6/19/2012 Minor cracks on parapet serving as curb. NE corner has one larger crack beginning to form. 9/20/2016
 - SW corner eroded around wing and up to top of slope. 6.24.19 - updated notes and quantities. - 6/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-130-08.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	80.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04510 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GREEN RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST OF DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	23.395	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 37' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	224438.2 5199501.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	44 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	26 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	305 Asphalt	209 Posted in "Tons"	26 Tons
Age and Service		Appraisal	
27 Yr Built	1949 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	750 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	1 1 1 1
19 Bypass, Detour Length	5 Miles	113 Scour Critical	4 Stable, needs action
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 21, 2018
32 Approach Roadway Width	32 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	31.8 Ft.	Other Special	N
48 Length of Max Span	37 Ft.	218 Channel Profile	1 48 07/20/2017
49 Structure Length	117.13 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	02/17/2017
51 Bridge Rdwy Width - Curb to Curb	32.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	37.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Eslinger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 45-130-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,327	95	4,111	5	216	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	216	0	0	100	216	0	0	0	0
510/1:Wearing Surfaces	sq.ft	4,327	100	4,327	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	469	96	449	0	0	4	20	0	0
1000/2:Corrosion	ft	20	0	0	0	0	100	20	0	0
515/2:Steel Protective Coating	sq.ft	100	96	96	0	0	0	0	4	4
3420/2:Peel/Bub/Crack(Stl Protect Co	sq.ft	4	0	0	0	0	0	0	100	4
205/3:Re Conc Column	each	4	100	4	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	75	100	75	0	0	0	0	0	0
234/1:Re Conc Pier Cap	ft	75	60	45	27	20	13	10	0	0
1080/1:Delamination/Spall/Patched Area	ft	20	0	0	50	15	17	5	0	0
1090/1:Exposed Rebar	ft	10	0	0	50	5	50	5	0	0
311/1:Moveable Bearing	each	8	100	8	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	233	100	233	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	233	86	200	0	0	14	33	0	0
1080/1:Delamination/Spall/Patched Area	ft	23	0	0	0	0	100	23	0	0
1090/1:Exposed Rebar	ft	10	0	0	0	0	100	10	0	0
8398/1:Slope Protection	each	1	0	0	0	0	100	1	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Piers were repaired by a contractor. NBI Remarks:. Minor spalling on pier 3 at repaired area. Minor spalling on pier 2 at nw column area. Leaching and corrosion over both piers. Girders corroded with some section loss at piers. Undermining on east abutment. 11/2010 - EFFLORESCENT STAINING UNDER DECK. 7/16/2013 - TREE NW WING SHOULD BE REMOVED BEAVER DAM LOCATED 150' NORTH. 11/20/14 Riprap has been added at east abutment 11/20/14 Top of Pier 3 SE side has spall and loose concrete. 11/20/14 SE bridge end rail has major spalling with exposed rebar. 9/15/2016 - Deck milled and overlaid with new rail 2016 construction. Concrete rail removed leaving only curb with a new rail retrofit rail on top. Spalling and delamination of south ends of pier 2 and 3 is advancing.

Alert Code 2: 11/2010 - GIRDERS CORRODED WITH SOME SECTION LOSS AT PIERS. MINOR SPALLING AND CONCRETE DETERIORATION AND EXPOSED REBAR ON CURB.11/20/14 Erosion of west bank advancing toward abutment. 9-21-18-concrete broken out on pier 2 west cap w/exposed rebar , concrete spall w/ rebar pier 3 south end . no posted signs.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-132-11.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Major Collector
04 City	GLADSTONE CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04531 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HEART RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	CITY OF GLADSTONE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	15.796	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 34' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	227914.1 5195690.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 26 48 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	485 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	32 Ft.	90 Date of Last Inspection	September 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	65 Ft.	Other Special	N
49 Structure Length	160.10 Ft.	218 Channel Profile	1 48 07/25/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	33.1 Ft.	213 Federal Aid Project Number	CDE-0112(801)453 SITE 1
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Eslinger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-132-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	5,285	100	5,285	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	640	100	640	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	66	100	66	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	322	100	322	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	322	100	322	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Checked rail bolts all bolts good. Some efflorescent staining under deck. Gas line attached to underside of bridge railing on east side. 11/2010 - MINOR HAIRLINE CRACKING AT VARIOUS LOCATIONS ON DECK. 6/22/2012 NW corner guardrail end bent back from collision. 9-19-18- 6 concrete rail pedestals missing NE side

Alert Code 1: Guardrail damage SW corner 2018 inspection, block broken , rail sliced @ joint.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-132-14.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04531 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ANTELOPE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH OF GLADSTONE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	11.997	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 34' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	227692.4 5189474.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 22 41 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	485 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	32 Ft.	90 Date of Last Inspection	September 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	50 Ft.	Other Special	N
49 Structure Length	125.98 Ft.	218 Channel Profile	1 48 07/25/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	33.1 Ft.	213 Federal Aid Project Number	CDE-0112(801)453 SITE 2
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Eslinger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-132-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,155	100	4,155	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	505	100	505	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	66	100	66	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	253	100	253	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	253	100	253	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Erosion in ditch bottom on the southwest side of bridge is 10 x 4' deep. Anchor bolts okay NBI Remarks: Some efflorescent staining under deck. Erosion in south ditches has had riprap placed 2007 inspection. 11/2010 - MINOR CRACKING ON DECK AT VARIOUS LOCATIONS.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-133-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ANTELOPE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 2 EAST GLADSTONE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 48' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 32' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	230026.8 5190656.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 36 65 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1973 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	15 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	September 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.0 Ft.	Underwater	N
48 Length of Max Span	68 Ft.	Other Special	N
49 Structure Length	69.88 Ft.	218 Channel Profile	1 48 07/25/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	22.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Brown, Eslinger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-133-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	561	99	556	1	5	0	0	0	0
1110/1:Cracking (PSC)	ft	5	0	0	100	5	0	0	0	0
215/1:Re Conc Abutment	ft	49	88	43	12	6	0	0	0	0
1130/1:Cracking (RC and Other)	ft	6	0	0	100	6	0	0	0	0
330/1:Metal Bridge Railing	ft	141	100	141	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	141	100	141	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/2010 - SOUTH ABUTMENT HAS MINOR CRACKING. NBI Remarks: 6/22/2012 All corners outside beam beginning to show distress.

Alert Code 1: 11/2010 - N ABUTMENT HAS CRACKING 1/8" WIDE APPROX. WITH STAINING. SW & SE CORNERS OF BACKWALL HAVE 1/4" CRACKING APPROX.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-134-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 7 NORTH GLADSTONE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 31' 22.00"	112 NBIS Bridge Length	No
GPS Coordinates XY	232012.6 5207083.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2017 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	October 18, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	20 Ft.	Other Special	N
49 Structure Length	20.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	10/13/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CBP-0045(16)03
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Strand
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
SINGLE 20 X 11 X 52' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-134-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	52	100	52	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10/18/2017 - Bridge was replaced with a new RCB.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-134-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	29.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	3 EAST 6 NORTH GLADSTONE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 56' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 31' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	232375.3 5205457.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 13 24 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 8 15 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	12 Tons
Age and Service		Appraisal	
27 Yr Built	1930 106 Yr Reconstructed	1951	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	1	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT	2018	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	0 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	10 Ft.	90 Date of Last Inspection	September 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	15.7 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 07/25/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	15.7 Ft.	212 Structure Load Rated	02/17/2017
52 Deck Width	18.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Brown, Eslinger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 45-134-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	560	0	0	100	560	0	0	0	0
1180/1:Abrasion	sq.ft	560	0	0	100	560	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	249	50	125	37	93	12	31	0	0
1900/2:Distortion	ft	124	0	0	75	93	25	31	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
215/3:Re Conc Abutment	ft	36	0	0	61	22	39	14	0	0
1080/3:Delamination/Spall/Patched Area	ft	14	0	0	0	0	100	14	0	0
1130/3:Cracking (RC and Other)	ft	8	0	0	100	8	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	4	0	0	100	4	0	0	0	0
6000/3:Scour	ft	10	0	0	100	10	0	0	0	0
231/2:Steel Pier Cap	ft	36	100	36	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
332/1:Timb Bridge Railing	ft	62	0	0	0	0	0	0	100	62
7000/1:Damage	ft	62	0	0	0	0	0	0	100	62
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	50	2	0	0	0	0	50	2

Remarks: 9/13/2007 - East abutment wings have been installed. NBI Remarks: 6/21/2012 Slope protection added to west abutment. 6/21/2012 West abutment does not have wings. 6/21/2012 Deck has double layer. 11/2010 - MINOR SECTION LOSS ON WEST ABUT 7/17/2013 - I-BEAMS MEASURE 12" X 5" X 28' (6) 2 12" CHANNEL ON ENDS. 9-20-18-abutment wall west side has moderate deterioration & cracking. east side has minor deterioration & cracking . see pictures 9-19-18

Alert Code 1: Three girders south side bent and pushed out of line. One pile bent in east abutment. 9/08/2016 - Erosion behind NW and SW abutment corners 3 feet under. Erosion at SE corner 2 feet deep at juncture with wing. 11/2010 - 9-20-18 EROSION BEHIND ABUTMENT WALLS.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-134-04.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	54.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 7 NORTH GLADSTONE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 57' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 31' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	232371.8 5205867.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	25 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	15 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	09 Tons
Age and Service		Appraisal	
27 Yr Built	1900 106 Yr Reconstructed	1972	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	3 Intolerable - Correct
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	0 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	September 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.4 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 07/25/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	17.7 Ft.	212 Structure Load Rated	02/17/2017
52 Deck Width	20.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Eslinger, Martin
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 45-134-04.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	614	100	612	0	0	0	2	0	0
1140/1:Decay/Section Loss	sq.ft	2	0	0	0	0	100	2	0	0
Notes:Horizontal deck plank on the East side of the bridge 10' from the North is decayed almost thru the plank. - 9/16/2019										
107/2:Steel Opn Girder/Beam	ft	279	100	279	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Limited effectiveness on coating, beginning to rust. - 9/16/2019										
202/3:Steel Column	each	10	0	0	50	5	50	5	0	0
1000/3:Corrosion	each	10	0	0	50	5	50	5	0	0
Notes:North piling has measurable section loss and heavy rusting, South piling also starting to rust at water line. - 9/16/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Protective system failing causing underlying metal to rust. - 9/16/2019										
216/3:Timber Abutment	ft	39	100	39	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	39	100	39	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Limited effectiveness. - 9/16/2019										
332/2:Timb Bridge Railing	ft	62	100	62	0	0	0	0	0	0
Notes:New curbing/rail was installed 2019. - 9/16/2019										
7363/1:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
Notes:Pilling has measurable section loss. - 9/16/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Pile rusted and corroded one pile north abutment driven at and angle. 11/2010 Scour hole under bridge. 11/2010 Curb decayed with one section gone. 7/17/2013 - NEW CURB NEEDS TO BE INSTALLED WEST & EAST SIDE . SCOUR HOLE NORHT ABUTMENT. 11/19/14 Stream side of NW wing has large scour/erosion area. 9/08/2016 - One driving plank on bridge has hole worn almost completely through in 5 foot area. Not all girders are bolted to the pier caps. 9-19-18 south barriers are slightly bent. south posted sign has been hit and needs to be set up. 8-28-19 - Replaced damaged running planks, added more running planks, and new curbs both sides. cta 9.16.19 - Some new deck runner planks were installed and widened out the driving area, new curbing/rail was also installed. The deck still has a horizontal plank that has an area of decay that is almost worn threw the plank. Column corrosion/rusting was not able to be checked for progression due to high water, used archive photo's for updated quantities. - 9/16/2019

Alert Code 2: 11/2010 - NORTH PILING HAS MEASURABLE SECTION LOSS & HEAVY RUSTING. - 9/16/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-135-20.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Applicable	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Minor Collector
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	Creek	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 2 EAST LEFOR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 30' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	231554.6 5179721.8	Condition	
98 Border Bridge	Not Applicable (P) %	58 Deck	7 Good
99 Border Bridge Struct No.		59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	5 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	4 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden N	Not Applicable	209 Posted in "Tons"	5 Tons
Age and Service		Appraisal	
27 Yr Built	1901 106 Yr Reconstructed	67 Structural Condition	Unknown (NBI)
42 Type of Service	1 Highway - On	68 Deck Geometry	Unknown (NBI)
	5 Waterway - Under	69 Underclear. Vert & Horiz	Unknown (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic		36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	1 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	August 23, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	20.8 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	
49 Structure Length	24.00 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	09/26/2019
51 Bridge Rdwy Width - Curb to Curb	20.8 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Brown, Abdelmokarm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	0 Ft.

Structure Number: 45-135-20.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	543	92	498	7	40	1	5	0	0
1140/1:Decay/Section Loss	sq.ft	45	0	0	89	40	11	5	0	0
Notes:Deck runner boards showing signs of decay/section loss. Board on the SE has decayed almost to the point of being ineffective. See photo. - 8/23/2019										
510/1:Wearing Surfaces	sq.ft	147	86	127	14	20	0	0	0	0
3230/1:Effectiveness (Wearing Surface)	sq.ft	20	0	0	100	20	0	0	0	0
Notes:Deck runner planks are decaying, SE plank almost to the point of being ineffective. - 8/23/2019										
117/1:Timber Stringer	ft	344	100	344	0	0	0	0	0	0
Notes:Stringers looked good, typical timber wearing but nothing of note. - 8/23/2019										
216/1:Timber Abutment	ft	24	0	0	92	22	8	2	0	0
1900/1:Distortion	ft	22	0	0	100	22	0	0	0	0
Notes:Top of both abutments appear to be leaning outward from the stream. - 8/23/2019										
6000/1:Scour	ft	2	0	0	0	0	100	2	0	0
Notes:Erosion / scour behind SE corner of abutment with a 2' void behind the abutment. - 8/23/2019										
228/1:Timber Pile	(EA)	10	60	6	0	0	40	4	0	0
Notes:All 4 of the piling that are cracked are also distorted / tilted, see photos. - 8/23/2019										
1160/1:Crack (Timber)	(EA)	4	0	0	0	0	100	4	0	0
Notes:West abutment 4th from South cracked at waterline. East abutment North most pile cracked on top where cap sits causing it to distort. 3rd and 4th from the North on the East abutment are also cracked and distorted. - 8/23/2019										
235/1:Timber Pier Cap	ft	24	0	0	100	24	0	0	0	0
1900/1:Distortion	ft	24	0	0	100	24	0	0	0	0
Notes:Both abutment caps are distorted, with the East being a little worse then the West due to cracked timber pile at the top. - 8/23/2019										
332/1:Timb Bridge Railing	ft	50	80	40	20	10	0	0	0	0
Notes:Timber curb railing. - 8/23/2019										
1160/1:Crack (Timber)	ft	10	0	0	100	10	0	0	0	0
Notes:North curb cracking/split 10'. - 8/23/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0
Notes:All wings looked good. - 8/23/2019										

Remarks: 8/2019 - Structure entered into BrM. Please confirm Quantities in the Field. cta 8/23/19 - structure inspected, see notes on defects for issues. This is on a section line that dead ends out in a field just over the hill to the East of this structure. Added timber railing/curb. - 8/23/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-138-21.0

200 System Designation	2 – County On	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	54.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04537 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 2 NORTH LEFOR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.799	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 42' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 25' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	237636.2 5178894.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Slab		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 17 30 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 12 22 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	26 Gravel/Dirt	209 Posted in "Tons"	21 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	70 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	0.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 20, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.9 Ft.	Other Special	N
48 Length of Max Span	20 Ft.	218 Channel Profile	1 48 07/31/2017
49 Structure Length	22.97 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	24.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 45-138-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	603	100	603	0	0	0	0	0	0
206/3:Timber Column	each	10	0	0	0	0	40	4	60	6
1160/3:Crack (Timber)	each	10	0	0	0	0	40	4	60	6
Notes:alert 3 all columns are bowing and cracked to some degree . columns 2and3 from west on south abut bowed to point of breaking. columns 1,2,3 from west on north abut extremely bowed - 6/20/2019										
216/3:Timber Abutment	ft	52	81	42	19	10	0	0	0	0
1900/3:Distortion	ft	10	0	0	100	10	0	0	0	0
Notes:Both abutments are bowing in towards the channel. - 6/20/2019										
235/2:Timber Pier Cap	ft	52	0	0	100	52	0	0	0	0
1900/2:Distortion	ft	52	0	0	100	52	0	0	0	0
Notes:south abutment cap is rotated away from stream. pier caps rotating due to abutment pressure. - 6/20/2019										
332/2:Timb Bridge Railing	ft	46	87	40	13	6	0	0	0	0
1170/2:Split/Delamination (Timber)	ft	6	0	0	100	6	0	0	0	0
Notes:Rail is split SE corner of the structure. - 6/20/2019										
8401/3:Wings	each	4	75	3	0	0	25	1	0	0
6000/3:Scour	each	1	0	0	0	0	100	1	0	0
Notes:SW wing is scouring working in behind abutment. - 6/20/2019										

Remarks: NBI Remarks: All piling at the south abutment are cracked and bowed in towards channel. North abutment has two piles cracked and bowed in towards channel. Five stringers are cracked. S.W. Corner piling split midway & one backing board broke. 11/2010 - SW CORNER OF WING HAS EROSION. 7/17/2013 - EROSION ALONG SW WING AND ABUTMENT. RIP RAP NW WING. RIP RAP NEEDED SW WING. 11/25/14 South abutment cap is rotated away from stream. 11/25/14 Top of piling both abutments lean away from channel. 9/14/2016 - Both backwalls are bowing toward the stream through the middle of the structure due to pressure causing the columns to bow. Pier caps are rotating due to abutment pressure. 9/27/2016 - Larson met with County road superintendent Al Heiser at the structure to inform him of our concerns with the piling. County said they would monitor the structure. 8/18/17 - Structure remains the same. 6-20-19 still need rip rap behind s w wing, structure remains same, bridge rail split s e corner. - 6/20/2019

Alert Code 3: 9/13/2016 - All columns are bowing and cracked to some degree. Columns 2 and 3 from West on South abutment bowed to point of breaking. Columns 1,2, and 3 from west on north abutment extremely bowed too. - 6/20/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-138-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	47.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST OF LEFOR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 40' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 25' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	237496.5 5175347.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 10 18 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 6 11 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	15 Tons
Age and Service		Appraisal	
27 Yr Built	1935 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	5 30 Year of ADT 2018	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	124 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 18, 2018
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	18.0 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 06/15/2017
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	02/17/2017
51 Bridge Rdwy Width - Curb to Curb	18.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 45-138-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	624	100	624	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	249	0	0	100	249	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
202/1:Steel Column	each	5	0	0	0	0	0	0	100	5
1000/3:Corrosion	each	5	0	0	0	0	0	0	100	5
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
206/3:Timber Column	each	4	100	4	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	16	0	0	50	8	50	8	0	0
1130/3:Cracking (RC and Other)	ft	16	0	0	50	8	50	8	0	0
216/3:Timber Abutment	ft	23	100	23	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	62	100	62	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: One pile cracked on northwest wing. 7/17/2013 - NE WING NEEDS RIP RAP DUE TO EROSION. NW WING CHANNEL RUNS AGAINST MAY NEED RIP RAP. SW DITCH SHOWS EROSION TOWARDS STRUCTURE. SE SHOWS EROSION ALSO. NO BRIDGE MARKERS.

Alert Code 1: 11/2010 - NW & NE PILING HAVE SECTION LOSS. NORTH ABUTMENT HAS CRACKING, SPALLING & DELAMINATION.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-139-17.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04537 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HEART RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	9 SOUTH OF TAYLOR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	6.399	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 46' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 25' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	238388.1 5185538.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 25 47 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1967 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	110 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	June 18, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	70 Ft.	Other Special	N
49 Structure Length	189.96 Ft.	218 Channel Profile	1 48 07/25/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.8 Ft.	213 Federal Aid Project Number	CS-898(1)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 45-139-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	5,899	100	5,899	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	761	100	761	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	62	100	62	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	381	100	381	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	381	100	381	0	0	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor concrete deterioration at the bottom of ice nose pier 3. 01/20/2009 - Scour holes behind all wings. 6/22/12 Minor deterioration on east side of pier # 3. 7/17/2013 - SW PIER CONCRETE BELOW ICE NOSE SHOWS DETERIATION. BRIDGE MARKERS ARE OK. STRUCTURE LOOKS GOOD. NOT MUCH WATER. NW PIER SCOUR HOLE IN FRONT OF NORTH SIDE TO THE WEST.

Alert Code 2: 15'x 5'x 3' scour hole at ice nose of pier 3.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-142-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 W 10 S OF RICHARDTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 21' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	243851.3 5180525.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	0 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	22.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	CBP-0045(15)02
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
Single, 22x11x52' RCB			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-142-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	52	100	52	0	0	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
6000/1:Scour	each	2	0	0	100	2	0	0	0	0

Notes:Scour and erosion at all 4 corners of the structure, also in ditch NE. - 6/20/2019

Remarks: 6.20.19- new box culvert, some erosion issues at all 4 corners and banks, lifting holes not grouted in. - 6/20/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-142-20.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 W 10 S OF RICHARDTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 20' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	244172.8 5180716.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	0 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 20, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	22.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	CBP-0045(15)03
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
Single, 22x11x56' RCB			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-142-20.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	56	98	55	2	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Spall on wall near NW corner. - 6/20/2019										
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
6000/1:Scour	each	2	0	0	100	2	0	0	0	0
Notes:Scour behind all wings, ditch NE side and NE top of the structure. - 6/20/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	4	0	0	100	4	0	0	0	0
Notes:All of the wings have small spalls at the joints or on the walls. SE wing has exposed rebar. - 6/20/2019										

Remarks: 6.20.19 - Banks around wings have scour issues. - 6/20/2019**Alert Code 2:** 6.20.19 - Exposed rebar in spalled area of SE wing, see photo. - 6/20/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-143-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PLUM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 W 10 S OF RICHARDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 20' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	245300.1 5180739.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1997 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 18, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	74 Ft.	Other Special	N
49 Structure Length	76.12 Ft.	218 Channel Profile	1 48 06/15/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.5 Ft.	213 Federal Aid Project Number	DPI-0036(003)452
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-143-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,357	100	2,357	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	305	100	305	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	151	100	151	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: 01/20/2009 - NW guardrail end section is damaged. 11/2010 - MINOR CRACKING AT VARIOUS LOCATIONS ON DECK. EFFLORESCENT STAINING UNDER DECK.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-144-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	24.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HEART RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	9 SOUTH OF RICHARDSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 44' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 19' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	246586.5 5181953.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 7 13 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 4 8 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	07 Tons
Age and Service		Appraisal	
27 Yr Built	1936 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	5 30 Year of ADT 2018	72 App. Rdwy. Alignment	3 Intolerable - Correct
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	0 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 18, 2018
32 Approach Roadway Width	10 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.7 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 06/15/2017
49 Structure Length	41.01 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	03/21/2017
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 45-144-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	753	100	753	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	164	0	0	100	164	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
111/2:Timber Open Girder	ft	82	0	0	100	82	0	0	0	0
206/3:Timber Column	each	8	0	0	63	5	38	3	0	0
1160/3:Crack (Timber)	each	1	0	0	0	0	100	1	0	0
6000/3:Scour	each	2	0	0	0	0	100	2	0	0
216/3:Timber Abutment	ft	36	50	18	50	18	0	0	0	0
332/2:Timb Bridge Railing	ft	82	0	0	50	41	0	0	50	41
8401/3:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: Date 8/9/2004: Two outside stringers are timber, the inside four are I-beam. NBI Remarks: Embankment erosion north of bridge approx. 100'. Poor roadway alignment, curve on each side of bridge. East abutment leaning in toward stream. Cap on west abutment not sitting straight on pile. Not cut straight. Center pile east abut cracked down 6'. East abut cap is rotated. Lifting off front pile 1". 6/22/2012 Drainage runs right along wings causing erosion around them. 7/17/2013 - NEW MARKDERS WERE ADDED. NE WING NEEDS RIP RAP ALSO SE WING & ABUTMENT BOTTOM PLANK EXPOSED TO ABUTMENT. SCOURING SE WING & NE WING. 9/14/2016 - SW corner abutment eroded back 1' from abutment below abutment. Backwall planks columns nearing exposure.

Alert Code 1: All wings are eroded to the point of straight up and down banks at all corners.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-147-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	31.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF KNIFE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 7 NORTH RICHARDTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 59' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 15' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	252884.3 5210226.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	3 Bank Prot Failed
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 12 22 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 7 13 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	09 Tons
Age and Service		Appraisal	
27 Yr Built	1914 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	15 30 Year of ADT 2019	72 App. Rdwy. Alignment	3 Intolerable - Correct
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	8 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 20, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	18.7 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 06/19/2017
49 Structure Length	33.14 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	03/21/2017
51 Bridge Rdwy Width - Curb to Curb	18.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Yusuf
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-147-01.0

Structure Number: 45-147-01.0

Element / Env. / Description		Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	624	0	0	100	624	0	0	0	0
1180/1:Abrasion	sq.ft	624	0	0	100	624	0	0	0	0
Notes: Deck is showing signs of wear. - 6/20/2019										
107/2:Steel Opn Girder/Beam	ft	269	0	0	78	209	22	60	0	0
Notes: both outside chanel girders turned into bottom center of structure. - 6/20/2019										
1000/2:Corrosion	ft	209	0	0	100	209	0	0	0	0
Notes: All the beams are showing signs of corrosion. - 6/20/2019										
1900/2:Distortion	ft	30	0	0	0	0	100	30	0	0
Notes: both outside channel turned into bottom center of structure span. - 6/20/2019										
7000/2:Damage	ft	30	0	0	0	0	100	30	0	0
Notes: Distortion of the beams caused by damage. - 6/20/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes: system has failed causing underlying metal to start to corrode. - 6/20/2019										
202/1:Steel Column	each	10	0	0	0	0	60	6	40	4
1000/1:Corrosion	each	6	0	0	0	0	100	6	0	0
Notes: All of the columns are corroding, more at waterline. - 6/20/2019										
1900/1:Distortion	each	4	0	0	0	0	0	0	100	4
Notes: 6.20.19 - 2 more steel columns showing beginning signs of starting to bend. Both west outside piling severely bent. - 6/20/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes: Protective system failed, metal starting to corrode. - 6/20/2019										
216/3:Timber Abutment	ft	39	0	0	100	39	0	0	0	0
1900/3:Distortion	ft	39	0	0	100	39	0	0	0	0
Notes: Both abutments are beginning to lean into embankment. - 6/20/2019										
231/2:Steel Pier Cap	ft	39	0	0	87	34	13	5	0	0
1000/2:Corrosion	ft	34	0	0	100	34	0	0	0	0
Notes: Metal is starting to corrode. - 6/20/2019										
1130/2:Cracking (RC and Other)	ft	5	0	0	0	0	100	5	0	0
Notes: Cap NW corner cracked at 2 bolt holes. - 6/20/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes: system failed causing metal to corrode. - 6/20/2019										
332/1:Timb Bridge Railing	ft	66	0	0	67	44	0	0	33	22
Notes: there is no metal railing in place - 6/20/2019										
1170/1:Split/Delamination (Timber)	ft	44	0	0	100	44	0	0	0	0
Notes: Most of the timer railing is splitting and/or delaminating in some form. - 6/20/2019										
7000/1:Damage	ft	22	0	0	0	0	0	0	100	22
Notes: Both rail North and South have damaged areas. - 6/20/2019										

Structure Number: 45-147-01.0

4000/1:Settlement	each	1	0	0	100	1	0	0	0	0
7363/1:Steel Section Loss	each	1	0	0	100	1	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1140/1:Decay/Section Loss	each	4	0	0	100	4	0	0	0	0

Notes:All 4 wings showing signs of decay. - 6/20/2019

Remarks: 11/15/2002 - Scour hole under bridge and on east side past structure 65'. NBI Remarks: Outside deck planks cracked & weathered. Both outside channel girders turned into bottom center of structure span. Some riprap along south abutment. All piles have moderate section loss at ground line. 12/05/2011 - SW, SE and NE corners have braces at top of outside channel girders to keep from pushing out at top. 9/8/2016 - There is no metal railing in place. 30 feet of distortion is due to damage. 6-19-18-no change 6-20-19 2 more steel column have bent / new pict taken - 6/20/2019

Alert Code 1: 12/08/2015 -North and south abutments both leaning into embankment. - 6/20/2019

Alert Code 3: Both west outside piling severely bent. S.W. Abutment cap appears to have dropped slightly.12/27/2013 - Piling at NW corner craked at 2 bolt holes where it is attached to pier cap.8/24/17 - No change. - 6/20/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-113-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Applicable	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Dickinson District	22 Owner	County Hwy Agency
03 County	Stark	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ANTELOPE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST 3 NORTH SCHEFIELD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 57' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	197619.8 5181598.9	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	15 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	16 Ft.	Other Special	N
49 Structure Length	33.17 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	02/17/2017
	0.0 Ft.	213 Federal Aid Project Number	BRO-0045(067)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
Double 16'x8' Precast RCB			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 45-113-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	104	100	104	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: 113.13.19 - No defects found at time of inspection, new box culvert. - 11/13/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKSNO3

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Dickinson District	22 Owner	City/Municipal Hwy Agenc
03 County	Stark	26 Functional	Urban, Collector
04 City	DICKINSON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08356 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location 4TH AVENUE EAST-DICKINSON		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.350	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 212098.1 5199708.3		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating HS 34	62 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating HS 17	31 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden 1	None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built 1970 106 Yr Reconstructed		67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT 3,050 30 Year of ADT 2019		72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	2.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	1 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 21, 2019
32 Approach Roadway Width	37 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	49.9 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 09/16/2017
49 Structure Length	32.15 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	5.9 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	5.9 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	37.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	49.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: DKSNO3

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	495	96	475	0	0	4	20	0	0
1080/2:Delamination/Spall/Patched Area	ft	10	0	0	0	0	100	10	0	0
Notes:delaminated and spalled areas on beams 1,3,9(2 spots), spall on s wall - 5/21/2019										
1090/2:Exposed Rebar	ft	10	0	0	0	0	100	10	0	0
Notes:exposed rebar in spalled areas - 5/21/2019										
215/2:Re Conc Abutment	ft	105	95	100	5	5	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
Notes:Spall on south abutment under girder - 5/21/2019										
1130/2:Cracking (RC and Other)	ft	20	100	20	0	0	0	0	0	0
Notes:Minor cracks on both abutments. - 5/21/2019										
333/2:Other Bridge Railing	ft	62	97	60	3	2	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:east rail has 1 ft spall each end - 5/21/2019										
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
1080/2:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes:spall on ne wing wall at joint and outside wing - 5/21/2019										

Remarks: NBI Remarks: Cracking concrete causing exposed rebar on precast beams, southwest side of bridge. SE part of floor has 1/4" gap from main part of floor. Minor cracking on both abutments. 10/22/2013 - Channel profile completed. 9/6/17 - Channel profile completed. SE corner by wing is starting to erode away, scour hole 2x4x2. 5-21-19 delamination and spall areas on beams 1,3,9(2 spots), spall on s wall, also cracking both walls. spall on ne wing wall at joint and outside wing. east rail has spall on each end - 5/21/2019

Alert Code 2: Spalling with exposed rebar on bottoms of concrete girders - 5/21/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKSNO4

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Dickinson District	22 Owner	City/Municipal Hwy Agenc
03 County	Stark	26 Functional	Urban, Local
04 City	DICKINSON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location 2ND AVENUE EAST-DICKINSON		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.500	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 46' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 211894.3 5199701.9		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating HS 33	59 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating HS 15	29 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden 31	Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built 1965 106 Yr Reconstructed	-1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	9 Above Desirable Crit
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT 675 30 Year of ADT 2019		72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	5.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	1 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 21, 2019
32 Approach Roadway Width	40 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	40.0 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 09/16/2017
49 Structure Length	32.15 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	3.9 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	40.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	47.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKS04

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
38/1:Re Concrete Slab	sq.ft	2,016	100	2,016	0	0	0	0	0	0
110/2:Re Conc Opn Girder/Beam	ft	404	98	394	0	0	3	10	0	0
1080/2:Delamination/Spall/Patched Area	ft	5	0	0	0	0	100	5	0	0
Notes:Spalls on 2 spots west and east beams along bottom - 5/21/2019										
1090/2:Exposed Rebar	ft	5	0	0	0	0	100	5	0	0
Notes:exposed rebar 2 spots west beam and 2 spots east beam bottom. - 5/21/2019										
215/2:Re Conc Abutment	ft	85	100	85	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	66	100	66	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Concrete delaminated on floor section along north abutment. Concrete slab under bridge is cracked & spalled. 10/22/2013 - Channel profile completed. 9/6/17 - Channel profile completed. - 5/21/2019

Alert Code 2: 5-21-19 exposed rebar 2 spots west beam and 2 spots east beam bottom - 5/21/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKSNO5

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Dickinson District	22 Owner	City/Municipal Hwy Agenc
03 County	Stark	26 Functional	Urban, Minor Arterial
04 City	DICKINSON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08340 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	SIMS ST. - DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.400	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 211694.9 5199722.7		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating HS 38	69 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating HS 18	34 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden 33	Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built 1952 106 Yr Reconstructed		67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT 3,200 30 Year of ADT 2019		72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	2.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	1 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 21, 2019
32 Approach Roadway Width	40 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	42.0 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 09/16/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	3.9 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	3.9 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	40.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	50.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: DKSNO5

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	325	96	311	0	0	4	14	0	0
1080/2:Delamination/Spall/Patched Area	ft	7	0	0	0	0	100	7	0	0
Notes:delamination and exposed rebar has gotten longer 2 west beams and east beam - 5/21/2019										
1090/2:Exposed Rebar	ft	7	0	0	0	0	100	7	0	0
Notes:exposed rebar in spalled areas on underside of girders - 5/21/2019										
215/2:Re Conc Abutment	ft	85	100	85	0	0	0	0	0	0
1130/2:Cracking (RC and Other)	ft	3	100	3	0	0	0	0	0	0
Notes:Hairline vertical crack on north abutment - 5/21/2019										
330/2:Metal Bridge Railing	ft	39	100	39	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor hairline vertical crack on backwall north abutment. Added width on abutments for sidewalks have a opening at the const. Joint approx. 1/2". 10/22/2013 - Channel profile completed. 9/6/17 - Channel profile completed. 5-21-19- The delamination and exposed rebar has gotten longer 2 west beams and east beam , also north 1/2 of box has 1-2' of silt - 5/21/2019

Alert Code 2: The two outside precast beam have exposed rebar. second beam from west also has exposed rebar - 5/21/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKSNO6

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Dickinson District	22 Owner	City/Municipal Hwy Agenc
03 County	Stark	26 Functional	Urban, Local
04 City	DICKINSON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3RD ST-8TH AVE-DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	212557.4 5199025.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	7	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1970 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	975 30 Year of ADT 2019	71 Waterway Adequacy	3 Intolerable - Correct
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	40 Ft.	90 Date of Last Inspection	May 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	51.8 Ft.	Underwater	N
48 Length of Max Span	5 Ft.	Other Special	N
49 Structure Length	35.10 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	4.9 Ft Rt-Side	Chaining Date	None
	4.9 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Martin, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
SEVEN, QUAD 7'X 5'X 54' CMP		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: DKSNO6

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/2:Steel Culvert	ft	217	0	0	54	117	46	100	0	0
1000/2:Corrosion	ft	100	0	0	0	0	100	100	0	0
Notes:All the steel pipe are corroded along the flowline - 5/21/2019										
1900/2:Distortion	ft	117	0	0	100	117	0	0	0	0
Notes:All of the pipe are distorted having a bow in the middle of them - 5/21/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Protective system failing causing pipe to corrode at flowline - 5/21/2019										
841/2:Re Conc Culvert Precast	ft	161	50	81	50	80	0	0	0	0
1900/2:Distortion	ft	80	0	0	100	80	0	0	0	0
Notes:Pipe is sagging in the middle - 5/21/2019										
8398/2:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	1	100	1	0	0	0	0	0	0
8402/2:Headwalls	each	2	0	0	100	2	0	0	0	0
1090/2:Exposed Rebar	each	1	0	0	100	1	0	0	0	0
Notes:Exposed rebar in spalled area on face of headwall - 5/21/2019										
1130/2:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:Both faces of headwall are cracking, one spalled area with exposed rebar - 5/21/2019										

Remarks: NBI Remarks: Minor cracking on face of structure. Rust on floor of metal pipes. Concrete headwalls on each side of pipes are cracked. Erosion at SE corner by storm sewer pipe. 9/10/2015 - Hole in NE side about 6" round 1'inside Metal pipes have sag in middle. 11/17/2011 - 3 of the pipe are RCP and 4 of the pipe are CMP. 5-21-19 north side fence at road damaged by collision. - 5/21/2019

Alert Code 2: Spalled area with exposed rebar face of headwall between 2 pipes. - 5/21/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKSNO7

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Dickinson District	22 Owner	City/Municipal Hwy Agenc
03 County	Stark	26 Functional	Urban, Minor Arterial
04 City	DICKINSON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08337 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2ND ST-8TH AVE-DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.400	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 212550.3 5198848.6		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1982 106 Yr Reconstructed		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 975 30 Year of ADT 2019		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	36 Ft.	90 Date of Last Inspection	May 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	45.9 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
TRIPLE, 8X6X48' RCB			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKS07

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	144	38	54	63	90	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	90	0	0	100	90	0	0	0	0
Notes:2 spall east barell s-end west wall , west barrell spall west side at joint. Inner walls showing signs of delamination - 5/21/2019										
331/2:Re Conc Bridge Railing	ft	26	77	20	23	6	0	0	0	0
1130/2:Cracking (RC and Other)	ft	6	0	0	100	6	0	0	0	0
Notes:Railing has minor cracks throughout. - 5/21/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Parapet has some hairline cracks and staining. Staining on construction joints on walls inside box. Grout on joints starting to come out. Inner walls have some cracking and one section has delamination. Scour hole 20' North of North end of box 4x7. 5-21-19 2 spall east barrel s-end wall, west barrel 1' silt in it, west barrel spall west side at joint. - 5/21/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKSNO8

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Dickinson District	22 Owner	City/Municipal Hwy Agenc
03 County	Stark	26 Functional	Urban, Minor Arterial
04 City	DICKINSON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08345 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location 1ST ST E-8TH AV-DICKINSON		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.400	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 212542.2 5198706.0		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1982 106 Yr Reconstructed		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 975 30 Year of ADT 2019		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	40 Ft.	90 Date of Last Inspection	May 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	47.9 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Martin, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 8X8X48' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKSNO8

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	144	47	67	54	77	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	72	0	0	100	72	0	0	0	0
Notes:Spall area in the West barrel North end is spalled, other areas showing delamination. - 5/21/2019										
1090/2:Exposed Rebar	ft	5	0	0	100	5	0	0	0	0
Notes:spall area west barrel n end has exposed rebar - 5/21/2019										
331/2:Re Conc Bridge Railing	ft	26	0	0	100	26	0	0	0	0
1130/2:Cracking (RC and Other)	ft	26	0	0	100	26	0	0	0	0
Notes:South concrete rail is cracking. - 5/21/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor cracking where wings & parapet tie together. Minor cracking and one spall area on the face of box. Some of the grouted joints are failing. 10/22/2013 - All water passes through east most opening. 5-21-19 spall area west barrel n end has exposed rebar , middle barrel has 6" of silt in it , bridge rail s- side has cracking, - 5/21/2019

Alert Code 2: exposed rebar West barrel North end in the spalled area - 5/21/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKSNO9

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Dickinson District	22 Owner	City/Municipal Hwy Agenc
03 County	Stark	26 Functional	Urban, Minor Arterial
04 City	DICKINSON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08329 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	W. OF SIMS AVE-DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.230	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 211534.0 5199785.7		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1982 106 Yr Reconstructed		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 3,450 30 Year of ADT 2019		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	2.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	42 Ft.	90 Date of Last Inspection	May 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	49.5 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	7.5 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Martin, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 8X6X54' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKSNO9

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	161	98	158	0	0	2	3	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	0	0	100	1	0	0
Notes:spalling at joint, south middle barrel east wall - 5/21/2019										
1090/2:Exposed Rebar	ft	2	0	0	0	0	100	2	0	0
Notes:south middle barrel east wall exposed rebar, middle barrel first joint - 5/21/2019										
331/2:Re Conc Bridge Railing	ft	26	62	16	39	10	0	0	0	0
1130/2:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:minor cracking throughout bridge rail - 5/21/2019										
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor scaling on face of box both sides. Some grout falling out at joints. 10/22/2013 - Water only flows through middle opening due to silt build up. 5-21-19 east and west barrels silt 1' deep. - 5/21/2019

Alert Code 2: Small spall with exposed rebar, North end of West barrel @ first joint. - 5/21/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKS10

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Dickinson District	22 Owner	City/Municipal Hwy Agenc
03 County	Stark	26 Functional	Urban, Local
04 City	DICKINSON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	W. OF SIMS AVE-DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 47' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 211553.4 5199966.8		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	5 Moderate Damage
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1982 106 Yr Reconstructed		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 1,625 30 Year of ADT 2019		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	3.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	46 Ft.	90 Date of Last Inspection	May 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	50.9 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	3.9 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Martin, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 8X6X54' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: DKS10

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	161	50	81	0	0	50	80	0	0
1080/2:Delamination/Spall/Patched Area	ft	40	0	0	0	0	100	40	0	0
Notes:Spall on roof of west barrel 2'x3' (this is in line with the flowline of the curb on the roadway above it), south side parapet and walls are badly spalled and delaminated, grout at joints falling out exposing spalled areas. - 5/21/2019										
1090/2:Exposed Rebar	ft	20	0	0	0	0	100	20	0	0
Notes:Exposed rebar in most all of the spalled out areas - 5/21/2019										
1120/2:Efflorescence/Rust Staining	ft	20	0	0	0	0	100	20	0	0
Notes:Staining along outside barrel walls and roof. - 5/21/2019										
331/2:Re Conc Bridge Railing	ft	26	62	16	39	10	0	0	0	0
1130/2:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:Railing on the south side of bridge is cracking. - 5/21/2019										
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Staining on joints and on bottom of box culvert. Grout used to patch joints is starting to fall out. 9/10/2015 - West barrel 1/2 full of sediment , all flow thru center barrel 9/10/2015 - Grout starting to fall out north side at joints also minor cracking. 5-21-19 the south parapet has more exposed rebar and spalling , also the spall in west barrel n-end bigger w/ 2'x 3' - 5/21/2019

Alert Code 1: Delamination & scaling/spalling on south side of parapet & walls. - 5/21/2019

Alert Code 2: Exposed rebar on parapet south end. Spall with exposed rebar in West barrel North end, in line with flowline of curb above it, curb area in road has been patched, see pictures. - 5/21/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKS11

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Dickinson District	22 Owner	City/Municipal Hwy Agenc
03 County	Stark	26 Functional	Urban, Local
04 City	DICKINSON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	8TH AVE EAST-DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 212565.9 5199223.2		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 42
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 22
208 Dk Overburden 1	None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1982 106 Yr Reconstructed		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 380 30 Year of ADT 2019		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	39 Ft.	90 Date of Last Inspection	May 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	58.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	46.6 Ft.	Underwater	N
48 Length of Max Span	44 Ft.	Other Special	N
49 Structure Length	46.92 Ft.	218 Channel Profile	1 48
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	09/16/2017
	6.9 Ft Lt-Side	207 Transporter Erector Routes and Sites	None
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	38.7 Ft.	213 Federal Aid Project Number	000-000-004(19)601
52 Deck Width	47.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: DKS11

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	459	87	400	13	59	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	59	0	0	100	59	0	0	0	0
Notes:minor pop outs & wearing / abrasion / delamination on top side of prestressed girders on driving surface - 5/23/2019										
215/2:Re Conc Abutment	ft	121	92	111	8	10	0	0	0	0
1130/2:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:minor cracking of grout along beams west side by abutment - 5/23/2019										
331/2:Re Conc Bridge Railing	ft	46	100	46	0	0	0	0	0	0
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
6000/2:Scour	each	1	0	0	100	1	0	0	0	0
Notes:SE bank behind wingwall is being eroded and slumping into stream. - 5/23/2019										

Remarks: NBI Remarks: Minor cracking of grout along beams-west side by abutment. 11/17/2011 - Concrete slope protection has been replaced with rip rap and pipe has been extended. 10/22/2013 - SE inside corner sloughing off. 10/22/2013 - Channel profile completed. 9/6/17 - Channel profile completed. Minor popouts & wearing/abrasion on top side of prestressed girders on the driving surface. 5-23-19 south east bank behind wing eroded and slumping up stream - 5/23/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKS12

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	82.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Dickinson District	22 Owner	City/Municipal Hwy Agenc
03 County	Stark	26 Functional	Urban, Minor Arterial
04 City	DICKINSON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08316 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HEART RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	SOUTHWEST DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.965	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 209740.8 5197722.0		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type stressed concrete continuous		61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type 1 Concrete-Cast-in-Place		63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface 1 Monolithic Concrete		64 Oper. Rating HS 41	74 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect 1 Epoxy Coated Reinforci		66 Inv. Rating HS 19	35 Tons
208 Dk Overburden 1	None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1986 106 Yr Reconstructed		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	4 Tolerable
28 Lanes on Structure	4	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 2,850 30 Year of ADT 2019		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	51 Ft.	90 Date of Last Inspection	November 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	18 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	50.9 Ft.	Underwater	N
48 Length of Max Span	66 Ft.	Other Special	N
49 Structure Length	166.01 Ft.	218 Channel Profile	1 48 09/16/2017
50 Curb/Sidewalk Widths	8.9 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	50.9 Ft.	213 Federal Aid Project Number	M-5-983(09)005
52 Deck Width	62.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Eslinger, Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: DKS12

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	10,323	90	9,322	10	1,001	0	0	0	0
1120/2:Efflorescence/Rust Staining	sq.ft	100	0	0	100	100	0	0	0	0
1130/2:Cracking (RC and Other)	sq.ft	201	0	0	100	201	0	0	0	0
1190/2:Abrasion(PSC/RC)	sq.ft	700	0	0	100	700	0	0	0	0
104/2:Pre Clsd Box Girder	ft	1,155	100	1,155	0	0	0	0	0	0
210/4:Re Conc Pier Wall	ft	125	98	123	2	2	0	0	0	0
1080/4:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
1090/4:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
215/2:Re Conc Abutment	ft	138	71	98	15	20	7	10	7	10
1120/2:Efflorescence/Rust Staining	ft	10	0	0	100	10	0	0	0	0
1130/2:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
6000/2:Scour	ft	20	0	0	0	0	50	10	50	10
Notes:South abutment has the same scouring as previous inspections. North abutment has a sinkhole on the backside of NE wing and a 20'x20'x3' scour that has gotten worse since discovered on the last inspection. - 11/8/2019										
321/2:Re Conc Approach Slab	sq.ft	100	50	50	50	50	0	0	0	0
Notes:11/8/19 - City has a crew out foam jacking the south approach slab. - 11/8/2019										
4000/2:Settlement	sq.ft	50	0	0	100	50	0	0	0	0
Notes:11/8/19 - City has a crew out foam jacking the south approach slab. - 11/8/2019										
331/2:Re Conc Bridge Railing	ft	331	82	271	18	60	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	30	0	0	100	30	0	0	0	0
1130/2:Cracking (RC and Other)	ft	331	91	301	9	30	0	0	0	0
333/2:Other Bridge Railing	ft	167	100	167	0	0	0	0	0	0
8398/2:Slope Protection	each	2	0	0	0	0	50	1	50	1
6000/2:Scour	each	2	0	0	0	0	50	1	50	1
Notes:Northeast abutment and wing has a sink hole and scouring that is progressively getting worse. See updated photos. - 11/8/2019										
8401/2:Wings	each	4	75	3	0	0	0	0	25	1
1130/2:Cracking (RC and Other)	each	4	100	4	0	0	0	0	0	0
6000/2:Scour	each	1	0	0	0	0	0	0	100	1
Notes:NE wingwall is suspended in the air from scouring/sinkhole behind the wing and working into the slope, this area also has a drainage pipe. See updated photos. - 11/8/2019										

Remarks: NBI Remarks: Deck has minor diagonal cracks on surface and efflorescent staining underneath. Barrier has minor cracks & staining. Efflorescent staining on South abutment walls at construction joints. Construction joint cracking. 11/17/2011 - South approach slab has settled about 2". Barriers have settled along with it. 9/10/2015 - All wing walls have minor cracking Channel profile completed. 9/6/17 - Pier 2 has a 1'x1' spall area around beam/diaphragm mid span, & one to the West has a delamination/spall area that looks to be starting as well. - 6/7/2019 11.8.19 - City called us out to look at the south abutment as they were concerned with the scouring underneath, it remains the same as previous inspections. NE abutment and wing however has gotten worse since the last inspection in June. Sink hole on the back side of the NE abutment causing water to wash in and worsen the scouring on the slope, drainage pipe in this area too that is in the scour area, see new photos. Substructure changed to a 5 from an 8 due to progressive scouring on the abutments. - 11/8/2019

Alert Code 1: 6.7.19 erosion along ne corner pier wall w scour hole 20'x20' and still moving - 6/7/2019 - 11/8/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKS12

Alert Code 2: 6.7.19 - exposed rebar on pier wall SW end. - 6/7/2019 11.8.19 - Erosion along south abutment east side has exposed piling. The scour erosion has run down to the pier creating a small sand bar. (moved from alert 1 - 11.8.19) - 11/8/2019

Alert Code 3: 6.7.19 erosion along ne corner pier wall w scour hole 20'x20' and still moving - 6/7/2019 11.8.19 - Erosion and scouring on the slop and behind the NE wingwall, sinkhole behind wing and scouring that has gotten worse around wing causing it to be suspended in the air, also a drainage pipe in this area. - 11/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKS13

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Dickinson District	22 Owner	City/Municipal Hwy Agenc
03 County	Stark	26 Functional	Urban, Collector
04 City	DICKINSON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	08358 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HEART RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	9TH AVE SE-DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 52' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 46' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	212254.6 5198052.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 33 60 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 15 29 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1996 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	8 Desirable Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	400 30 Year of ADT	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	32 Ft.	90 Date of Last Inspection	May 28, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	35.8 Ft.	Underwater	N
48 Length of Max Span	74 Ft.	Other Special	N
49 Structure Length	200.13 Ft.	218 Channel Profile	1 48 09/16/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	8.2 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	36.1 Ft.	213 Federal Aid Project Number	BRU-5-983(014)014
52 Deck Width	47.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: DKS13

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	9,505	100	9,485	0	20	0	0	0	0
Notes:some eff staining on underside of deck, some drain pipe have been broken off on each side of deck. - 5/28/2019										
1120/2:Efflorescence/Rust Staining	sq.ft	20	0	0	100	20	0	0	0	0
Notes:Staining present on the underside of the deck. - 5/28/2019										
510/2:Wearing Surfaces	sq.ft	9,505	100	9,505	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	1,171	100	1,171	0	0	0	0	0	0
210/4:Re Conc Pier Wall	ft	85	100	85	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	98	100	98	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	400	99	397	1	3	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:spall on NE jersey barrier transition area - 5/28/2019										
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8398/4:Slope Protection	each	4	100	4	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Some efflorescent staining on underside of deck. Large spall on transition portion of jersey barrier ne corner where jersey barrier meets rail on bridge. Some drain pipe have been broken off on each side of deck. South end of bridge seperating from asphalt approx.3"wide 11/17/2011 - Fill behind north and south abutment settling, creating a void behind abutment walls. Visually there is at least a 2' void on NE corner. 10/23/2013 - Channel profile completed. 9/6/17 - Channel profile completed. 5-23-19 there was a fire pit and mattress under structure east side , looks like cooking and staying warm , there is staining on roof and back wall see pict - 5/28/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKS14

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Dickinson District	22 Owner	City/Municipal Hwy Agenc
03 County	Stark	26 Functional	Urban, Collector
04 City	DICKINSON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 00983 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE WAY	102 Direction of Traffic	2 2-way traffic
09 Location	15TH ST WEST-DICKINSON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.450	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 47' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 210508.7 5200962.3		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 2003 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 4,125 30 Year of ADT 2019		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	3.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	48 Ft.	90 Date of Last Inspection	May 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	47.9 Ft.	Underwater	N
48 Length of Max Span	15 Ft.	Other Special	N
49 Structure Length	48.88 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	47.9 Ft.	213 Federal Aid Project Number	SU-5-983(027)027
52 Deck Width	71.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Martin, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
TRIPLE, 15X7X72' PRECAST RCB			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKS14

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
245/3:Pre Concrete Culvert	ft	216	100	216	0	0	0	0	0	0
1110/3:Cracking (PSC)	ft	3	100	3	0	0	0	0	0	0
Notes:Cracking on grout cap west interior end, north side. Minor crack on north parapet mid span. - 5/23/2019										
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/4:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Grout cap on West interior end North side, minor hairline cracking. Minor crack on North parapet mid span.
Vegetation blocking all box ends on South. 5-23-19 nothing changed took new pictures - 5/23/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKS15

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Dickinson District	22 Owner	City/Municipal Hwy Agenc
03 County	Stark	26 Functional	Urban, Collector
04 City	DICKINSON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	00983 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE WAY	102 Direction of Traffic	2 2-way traffic
09 Location	21 ST WEST	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 48' 29.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	209985.2 5201640.6	Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2013 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	4,000 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	48 Ft.	90 Date of Last Inspection	May 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	47.9 Ft.	Underwater	N
48 Length of Max Span	9 Ft.	Other Special	N
49 Structure Length	23.09 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/13/2013
	0.0 Ft.	213 Federal Aid Project Number	M-5-983(08)008
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 11 In.	216 Inspector	Martin, Lutes
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
DOUBLE 9 X 6 X 97' RCB			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKS15

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	194	100	194	0	0	0	0	0	0
1010/1:Cracking	ft	10	100	10	0	0	0	0	0	0
Notes:Minor hairline cracking on North parapet and inside walls - 5/23/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:vegetation in chanel both ends - 5/23/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor hairline crack on North parapet. Vegetation in channel, both ends of box. 5-23-19 new pict taken no changes - 5/23/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKS16

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Dickinson District	22 Owner	City/Municipal Hwy Agenc
03 County	Stark	26 Functional	Urban, Collector
04 City	DICKINSON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	00983 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RAILROAD	102 Direction of Traffic	2 2-way traffic
09 Location	STATE AVENUE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 48' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	209623.5 5198494.0	Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Stringer/Multi-beam or Girder		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 43
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 20
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	4 Highway-railroad - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	8 Equal Desirable
29 ADT	4,000 30 Year of ADT	71 Waterway Adequacy	N Not applicable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	48 Ft.	90 Date of Last Inspection	May 30, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	0
47 Total Horizontal Clearance	51.0 Ft.	Underwater	0
48 Length of Max Span	101 Ft.	Other Special	0
49 Structure Length	355.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	5.0 Ft Rt-Side	Chaining Date	None
	10.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	02/16/2017
	51.0 Ft.	213 Federal Aid Project Number	SOIA-SAP-CPU-5-983(050)050
52 Deck Width	67.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 11 In.	216 Inspector	Martin, Yusuf
54 Min Vert Underclearance	23 Ft. 0 In.	Navigation Data	
	R Railroad beneath struc	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	30.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
	R Railroad beneath struc	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	27.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: DKS16

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	24,080	100	24,070	0	10	0	0	0	0
1080/3:Delamination/Spall/Patched Area	sq.ft	5	0	0	100	5	0	0	0	0
Notes:minor spalls at various area's on deck, top and bottom - 5/30/2019										
1120/3:Efflorescence/Rust Staining	sq.ft	5	0	0	100	5	0	0	0	0
Notes:staining underside of deck - 5/30/2019										
109/2:Pre Opn Conc Girder/Beam	ft	3,905	100	3,895	0	10	0	0	0	0
1110/2:Cracking (PSC)	ft	10	100	10	0	0	0	0	0	0
Notes:Minor cracking on a few girders - 5/30/2019										
1120/2:Efflorescence/Rust Staining	ft	10	0	0	100	10	0	0	0	0
Notes:efflorence present at cracked areas. - 5/30/2019										
205/3:Re Conc Column	each	12	100	12	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	135	99	133	2	2	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:spall on outside of abutment / wing wall NW corner - 5/30/2019										
1090/3:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:exposed rebar in spalled area - 5/30/2019										
220/3:Re Conc Pile Cap/Ftg	ft	177	100	177	0	0	0	0	0	0
234/3:Re Conc Pier Cap	ft	200	100	200	0	0	0	0	0	0
313/3:Fixed Bearing	each	55	100	55	0	0	0	0	0	0
321/3:Re Conc Approach Slab	sq.ft	5,426	100	5,426	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	710	100	710	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	710	100	710	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	710	100	710	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	50	100	50	0	0	0	0	0	0
Notes:minor hairline cracking on bridge rail - 5/30/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 5-30-19 hair line cracks through out bridge rail , small pop outs on curbs and on sidewalk at joints at main bridge joint. pop out ne corner of end wall top, eff staining under deck at diaphragms at s e corner - 5/30/2019

Alert Code 2: exposed rebar n w corner where trucks drive under on west side - 5/30/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKS17

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Dickinson District	22 Owner	City/Municipal Hwy Agenc
03 County	Stark	26 Functional	Urban, Collector
04 City	DICKINSON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	00983 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE WAY	102 Direction of Traffic	2 2-way traffic
09 Location	STATE AVENUE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 48' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	209778.9 5201707.5	Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2015 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	4,000 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	48 Ft.	90 Date of Last Inspection	May 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	18.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	0
47 Total Horizontal Clearance	47.9 Ft.	Underwater	0
48 Length of Max Span	10 Ft.	Other Special	0
49 Structure Length	45.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/19/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 11 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Martin, Lutes
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
QUAD 10 X 8 X 110' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: DKS17

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	440	98	430	2	10	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
Notes:spall on NW corner of box where wing wall attaches to box at joint - 5/23/2019										
1130/3:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
Notes:grout cap cracking west end - 5/23/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
1080/3:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes:north west wing connection has a spalled area that has been repaired - 5/23/2019										

Remarks: Grout cap on West end has hairline crack. NW wingwall connection has a spalled area that has been repaired, possibly from installation. 5-23-19 spall on n w wing at joint w/box , new pict taken - 5/23/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 46-102-30.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Steele	26 Functional	Rural, Major Collector
04 City	WILLOW LAKE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04603 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	3URLINGTON NORTHERN RR	102 Direction of Traffic	2 2-way traffic
09 Location	CITY OF LUVERNE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.900	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 15' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 56' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	580190.2 5233783.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	N N/A (NBI)
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 27 49 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 16 30 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1963 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	2 Railroad - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	6 Equal Minimum
29 ADT	310 30 Year of ADT 2017	71 Waterway Adequacy	N Not applicable
109 Average Daily Truck Traffic	11.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	14 Miles	36 Traffic Safety Features	0 0 1 1
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 29, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	58 Ft.	Other Special	N
49 Structure Length	154.86 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	05/25/2017
52 Deck Width	30.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	23 Ft. 6 In.	216 Inspector	Fischer, Sorum
	R Railroad beneath struc	Navigation Data	
55 Min Lateral UnderClear. - Rt	15.4 Ft.	38 Navigation Control	NA-no waterway
	R Railroad beneath struc	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 46-102-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,661	99	4,591	2	70	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	70	0	0	100	70	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	617	99	613	0	0	1	4	0	0
1000/2:Corrosion	ft	4	0	0	0	0	100	4	0	0
515/2:Steel Protective Coating	sq.ft	100	99	99	0	0	0	0	1	1
3440/2:Eff (Stl Protect Coat)	sq.ft	100	99	99	0	0	0	0	1	1
205/2:Re Conc Column	each	6	100	6	0	0	0	0	0	0
210/2:Re Conc Pier Wall	ft	62	100	62	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	72	90	65	10	7	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
1130/2:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
234/2:Re Conc Pier Cap	ft	66	100	66	0	0	0	0	0	0
312/2:Enclosed Bearing	each	8	75	6	25	2	0	0	0	0
1000/2:Corrosion	each	2	0	0	100	2	0	0	0	0
313/2:Fixed Bearing	each	8	100	8	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	305	0	0	100	305	0	0	0	0
1000/1:Corrosion	ft	305	0	0	100	305	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
331/1:Re Conc Bridge Railing	ft	308	100	308	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor spalling backwall northwest corner. Minor crack backwall southeast corner. Minor transverse deck cracking with some seepage underside of deck - center span. Minor sag in beams center span. The bearings are encased 4" in each abutment which actually are a rocker type bearing which has been poured in with the backwall.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 46-110-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	75.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Steele	26 Functional	Rural, Local
04 City	CARPENTER TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 1 SOUTH OF HOPE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 18' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 46' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	592966.4 5240284.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 18 33 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 11 20 Tons
Dk Protect	None	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	203 Gravel/Dirt	209 Posted in "Tons"	20 Tons
Age and Service		Appraisal	
27 Yr Built	1938 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	24 30 Year of ADT 2017	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 29, 2018
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	20.0 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 04/18/2017
49 Structure Length	33.14 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	05/25/2017
51 Bridge Rdwy Width - Curb to Curb	20.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 46-110-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	667	100	667	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	285	0	0	0	0	100	285	0	0
1000/2:Corrosion	ft	285	0	0	0	0	100	285	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
202/3:Steel Column	each	10	0	0	0	0	100	10	0	0
1000/3:Corrosion	each	10	0	0	0	0	100	10	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	39	0	0	100	39	0	0	0	0
7000/3:Damage	ft	39	0	0	100	39	0	0	0	0
231/2:Steel Pier Cap	ft	39	0	0	0	0	100	39	0	0
1000/2:Corrosion	ft	39	0	0	0	0	100	39	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
330/1:Metal Bridge Railing	ft	66	0	0	100	66	0	0	0	0
7000/1:Damage	ft	66	0	0	100	66	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0

Remarks: NBI Remarks: Top three concrete planks in abutment backwalls are tilted away. Poor vertical roadway alignment. No curb. Rusty girders. Vehicle damage to both railings. Minor rusting and section loss of abutment pile at waterline. Poor channel alignment to the west. 10/2016 - Damage to north posted sign.

Alert Code 1: Scour hole under structure 25' x 40' x 3.0' deep.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 46-112-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Steele	26 Functional	Rural, Local
04 City	CARPENTER TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF HOPE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 18' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 43' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	596201.1 5239649.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 26 47 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 15 28 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	100 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1937	67 Structural Condition	6 Equal Min Criteria
106 Yr Reconstructed	1983	68 Deck Geometry	5 Above Tolerable
42 Type of Service	1 Highway - On	69 Underclear. Vert & Horiz	N Not applicable (NBI)
	5 Waterway - Under	71 Waterway Adequacy	6 Equal Minimum
28 Lanes on Structure	2	72 App. Rdwy. Alignment	8 Equal Desirable Crit
29 ADT	130	36 Traffic Safety Features	0 0 0 0
30 Year of ADT	2017	113 Scour Critical	U Unknown Scour
109 Average Daily Truck Traffic	13.00		
19 Bypass, Detour Length	4 Miles		
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 29, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	26.9 Ft.	Other Special	N
48 Length of Max Span	20 Ft.	218 Channel Profile	1 48 04/18/2017
49 Structure Length	22.97 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	05/25/2017
51 Bridge Rdwy Width - Curb to Curb	26.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 46-112-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	635	100	635	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	262	0	0	0	0	100	262	0	0
1000/2:Corrosion	ft	262	0	0	0	0	100	262	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
111/2:Timber Open Girder	ft	66	100	66	0	0	0	0	0	0
206/2:Timber Column	each	12	100	12	0	0	0	0	0	0
216/2:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	46	0	0	0	0	100	46	0	0
1000/1:Corrosion	ft	46	0	0	0	0	100	46	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
332/1:Timb Bridge Railing	ft	46	100	46	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Rusty girders. Minor rotting of wing piles. Heavy vegetation in channel both sides.

Alert Code 1: 10/2018 - Beaver dam 100' east restricting flow thru channel.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 46-113-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	83.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Steele	26 Functional	Rural, Local
04 City	ELLSBURY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MAPLE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST OF COLGATE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 14' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 43' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	596696.2 5232631.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 22 40 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 13 24 Tons
208 Dk Overburden	203 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	16 Tons
27 Yr Built	1950 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	4 Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	17 Ft.	90 Date of Last Inspection	October 29, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.0 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	1 48 05/09/2017
50 Curb/Sidewalk Widths	0.4 Ft Rt-Side	Chaining Date	None
	0.4 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	19.0 Ft.	212 Structure Load Rated	05/25/2017
52 Deck Width	20.7 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 46-113-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	634	100	634	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	580	0	0	0	0	100	580	0	0
1000/2:Corrosion	ft	580	0	0	0	0	100	580	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
202/3:Steel Column	each	10	0	0	0	0	100	10	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
216/3:Timber Abutment	ft	36	92	33	8	3	0	0	0	0
1170/3:Split/Delamination (Timber)	ft	3	0	0	100	3	0	0	0	0
231/2:Steel Pier Cap	ft	36	0	0	0	0	100	36	0	0
1000/2:Corrosion	ft	36	0	0	0	0	100	36	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
330/1:Metal Bridge Railing	ft	84	100	84	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	61	31	19	0	0	69	42	0	0
7000/1:Damage	ft	42	0	0	0	0	100	42	0	0
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Rusty girders. Poor vertical roadway alignment from east. Bank erosion, east bank south of structure. Posted 20 mph both ends and bump ahead. New timber deck, timber curb, w-beam guardrail & 10 stringers added in 2008, steel girders added between existing girders. 01/2011 - Under contract in 2010 county replaced 5 girders on north side, repaired deck and north side guardrail after ice impact damage. Displaced riprap east abutment.

Alert Code 1: 10/2018 - Vehicle damage to north side guardrail.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 46-114-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	69.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Steele	26 Functional	Rural, Local
04 City	COLGATE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 1 SOUTH OF HOPE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 17' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 07.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	599423.3 5238061.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 14 25 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 8 16 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	22 Tons
Age and Service		Appraisal	
27 Yr Built	1976 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	24 30 Year of ADT 2017	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 29, 2018
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.6 Ft.	Other Special	N
48 Length of Max Span	20 Ft.	218 Channel Profile	1 48 04/18/2017
49 Structure Length	21.98 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	05/25/2017
51 Bridge Rdwy Width - Curb to Curb	24.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 46-114-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	592	100	592	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	279	0	0	0	0	100	279	0	0
1000/2:Corrosion	ft	279	0	0	0	0	100	279	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	59	97	57	3	2	0	0	0	0
1170/2:Split/Delamination (Timber)	ft	2	0	0	100	2	0	0	0	0
332/1:Timb Bridge Railing	ft	46	46	21	0	0	54	25	0	0
1170/1:Split/Delamination (Timber)	ft	25	0	0	0	0	100	25	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railings. Minor fire damage to both south wings. Rusty girders. Top plank missing northwest wing. East side timber curb split.

Alert Code 1: North channel bank erosion with some undermining of the north abutment bottom plank with displaced riprap - See Photo.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 46-118-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	27.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Steele	26 Functional	Rural, Local
04 City	BEAVER CREEK TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	10 EAST 6 NORTH OF FINLEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 36' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 36' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	603977.0 5274384.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 20 36 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 12 22 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	03 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 11, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.1 Ft.	Other Special	N
48 Length of Max Span	33 Ft.	218 Channel Profile	1 48 06/18/2013
49 Structure Length	35.10 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	05/25/2017
51 Bridge Rdwy Width - Curb to Curb	17.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, inspector1
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 46-118-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	635	93	589	7	46	0	0	0	0
1090/1:Exposed Rebar	sq.ft	6	0	0	100	6	0	0	0	0
Notes:Spalling with exposed rebar underside of Bridge deck approx. mid span in-between Girders 1 and 2 from the North. See Photo. - 12/11/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	40	0	0	100	40	0	0	0	0
Notes:Abrasion to deck. - 12/11/2019										
107/2:Steel Opn Girder/Beam	ft	269	0	0	0	0	100	269	0	0
1000/2:Corrosion	ft	259	0	0	0	0	100	259	0	0
Notes:Rusting to all Girders. See Photo. - 12/11/2019										
1900/2:Distortion	ft	10	0	0	0	0	100	10	0	0
Notes:Distortion to North Outside Girder near East Abutment. County Forces bolted Outside Girder to Girder 2 from the North to prevent additional rotation. See Photo. - 12/11/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of Effectiveness. - 12/11/2019										
215/2:Re Conc Abutment	ft	36	0	0	6	2	94	34	0	0
1090/2:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
Notes:Spalling with exposed rebar atSW Corner of West Abutment. See Photo. - 12/11/2019										
1190/2:Abrasion(PSC/RC)	ft	16	0	0	0	0	100	16	0	0
Notes:Wear and scaling to lower portion of West Abutment with 1.5" of section loss. See Photo. Various horizontal, diagonal, and vertical cracking to Abutment. See Photo. - 12/11/2019										
4000/2:Settlement	ft	18	0	0	0	0	100	18	0	0
Notes:East abutment with inward movement at top and outward movement at bottom causing lean. Refer to Alert Code 3 for Measurements. See Photos. Spalling to top of East Abutment under Girders due to movement. - 12/11/2019										
331/1:Re Conc Bridge Railing	ft	69	96	66	0	0	4	3	0	0
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	0	0	100	3	0	0
Notes:Spalling at NW Corner of North Railing. See Photo. Minor spalling at various rail post anchors. - 12/11/2019										
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
8401/2:Wings	each	4	50	2	25	1	0	0	25	1
1080/2:Delamination/Spall/Patched Area	each	1	0	0	0	0	0	0	100	1
Notes:Portion of NW Wing completely spalled out. See photo. - 12/11/2019										
1130/2:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:Vertical Cracking at SE Wing due to inward movement. Wing beginning to separate from Abutment. So Photo. - 12/11/2019										

Remarks: 2/15/2005 - East abutment moving in at top, measurement taken at north end 15", south end 9". see photo.
 2/12/2007 - Measurement taken at north end of East Abutment increased to 18" , south end 11". 9/12/2007 - No change in movement. 02/13/2009 - East abutment movement increased. Measurements at top (paint marked). North end now 20", South end 12". North fascia beam moving away from deck. Concrete backwall diaphragm broke out at NE corner. NBI Remarks: Spalling under beams east abutment. Concrete deteriorating both abutments. Chunk broke out top northwest wing with spalling & exposed rebar. 11/2016 - County added sheet piling and riprap at the NE wing. See Photo. Channel runs along east abutment. 10/2018 - Posted 03 tons passenger cars only both ends. 12/2019 - North two girders bolted with plates on webs to tie together and prevent additional twisting of North Facia Girder. See Photo. Inspection incomplete in November 2019 due to the completion of the Incomplete October 2019 County Inventory. Inspection completed 12/11/2019. - 12/11/2019

Structure Number: 46-118-04.0

Alert Code 1: Scaling lower portion west abutment exposing reinforcing steel southwest corner and up to 1 1/2" of section loss near the center of the abutment. Lower portion approximately 3" of bow to the east abutment. - 12/11/2019

Alert Code 3: 01/2011 -East abutment moved in 22" north side & 15" south side, a change from 20" & 12" previously. North outside girder twisting & moving away @ the NE corner due to abutment movement. Inward movement east abutment changed from 15" in 2005 to 20" in 2011 north side & 8" to 15" south side. 7/26/12 - East abutment moved in 24" north side, 22" previously. East abutment moved in 15" south side-no change from previous inspection. Continued inward movement noted in 2012 @ the NE corner. 10/1/14 - East abutment moved in 30" north side, 27.5" previously, south side moved in 20", 19 1/2" previously. East abutment leans away 3" in 4' measured @ center 2.75" before.. Span length now measures 29.9 north side @ top. 11/2015 -Span length north side 29.75' was 29.9'. Void area behind NE corner of east abut. 10/25/2016 - East abutment leans away 3.25 in 4'. Was 3" in 4'. East abutment moved in 32" north side, 30" before. Continuous movement of the east abutment. 11/2017 - EAST ABUTMENT LEANS IN 3.5" IN 4' A CHANGE FROM 3.25". MINOR ADDITIONAL MOVEMENT IN 2017. No change in east abutment lean measurements. 12/2019 - No change in the 3 1/2" of Lean to East Abutment. East Abutment Inward Movement at 22" SE Corner. Measured on top and underneath to from front of endwall to front of Abutment Face. No Change. East Abutment Inward Movement observed at 34" at NE Corner. Measured at Top and underneath from front of Endwall to front of Abutment Face. A change from 32". Additional inward movement observed. See Photos. - 12/11/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 46-119-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Steele	26 Functional	Rural, Local
04 City	NEWBURGH TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	12 EAST 5 NORTH OF FINLEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 35' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 34' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	606791.2 5271558.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1995 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 31, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-46(12)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X12X44' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 46-119-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	89	100	89	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Precast sections seperated 1/2" to 1". 01/2011 - Minor horizontal cracking NE wing. Channel bank erosion downstream & near both east wings. 10/2018 - 1.5' of buildup in north barrel. Channel flows thru south barrel.

Alert Code 1: 2' deep scour hole just off west end south barrel - 2' x 5' x 15'.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-105-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	87.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Local
04 City	ST. PAUL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	3URLINGTON NORTHERN RR	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST MEDINA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 22' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	471753.7 5192651.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	N N/A (NBI)
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 12 23 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1995 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	2 Railroad - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	7 Above Minimum
29 ADT	120 30 Year of ADT	71 Waterway Adequacy	N Not applicable
109 Average Daily Truck Traffic	13.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	March 27, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	87 Ft.	Other Special	N
49 Structure Length	215.88 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	RSO-47(16)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	23 Ft. 10 In.	216 Inspector	Rowell, Belanger
	R Railroad beneath struc	Navigation Data	
55 Min Lateral UnderClear. - Rt	18.0 Ft.	38 Navigation Control	Permit Not Required
	R Railroad beneath struc	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 47-105-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	6,588	100	6,588	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	843	100	843	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	72	94	68	6	4	0	0	0	0
1130/1:Cracking (RC and Other)	ft	4	0	0	133	4	0	0	0	0
Notes: _										
215/1:Re Conc Abutment	ft	69	83	57	17	12	0	0	0	0
1120/1:Efflorescence/Rust Staining	ft	3	0	0	100	3	0	0	0	0
Notes: _										
1130/1:Cracking (RC and Other)	ft	9	0	0	113	9	0	0	0	0
Notes: _										
321/1:Re Conc Approach Slab	sq.ft	100	0	0	0	0	100	100	0	0
4000/1:Settlement	sq.ft	100	0	0	0	0	100	100	0	0
Notes: _										
331/1:Re Conc Bridge Railing	ft	433	98	424	2	9	0	0	0	0
1130/1:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes: _										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Collision damage to all approach guardrail. Moderate settlement on both approach slabs. Deck drainpipe broken causing moderate erosion on SE slope. Minor erosion SE corner of approach slab. All bridge end seals have failed. Voids under both approach slabs at approach slab lip.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-117-00.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Local
04 City	GLACIER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PIPESTEM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 NORTH 8 WEST EDMUNDS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 19' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 07' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	490135.0 5241495.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 25 47 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1998 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	March 27, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	66 Ft.	Other Special	N
49 Structure Length	69.88 Ft.	218 Channel Profile	1 48 06/13/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	DPI-0036(004)161
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Belanger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-117-00.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,131	94	2,011	6	120	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	120	0	0	100	120	0	0	0	0
Notes: _										
104/2:Pre Clsd Box Girder	ft	269	100	269	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	97	60	3	2	0	0	0	0
1130/3:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
Notes: _										
330/2:Metal Bridge Railing	ft	141	100	141	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: No bridge end markers. SW 1 guard rail post damaged.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-119-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Local
04 City	WALTERS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PIPESTEM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 5 WEST EDMUNDS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 17' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 04' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	493893.5 5237471.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 51 93 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	March 26, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	51.84 Ft.	218 Channel Profile	1 48 06/13/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.2 Ft.	213 Federal Aid Project Number	SOS-47(11)
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-119-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,593	98	1,563	2	30	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	30	0	0	100	30	0	0	0	0
Notes: _										
104/1:Pre Clsd Box Girder	ft	207	100	207	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	86	53	15	9	0	0	0	0
1130/3:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes: _										
331/1:Re Conc Bridge Railing	ft	105	93	98	7	7	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes: _										
1090/1:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes: _										
1130/1:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Piling still exposed, beginning to scour, but encased in concrete. SW corner moderate erosion. NW guardrail damaged.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-121-04.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	75.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Major Collector
04 City	WALTERS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04706 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PIPESTEM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 4 WEST EDMUNDS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	20.196	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 16' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 03' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	495716.8 5235095.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 29 52 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 13 25 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1970 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	65 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	14 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	March 26, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	101.05 Ft.	218 Channel Profile	1 48 06/13/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.2 Ft.	213 Federal Aid Project Number	ER-147(3)
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 47-121-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	1,010	100	1,008	0	2	0	0	0	0
1130/2:Cracking (RC and Other)	ft	2	100	2	0	0	0	0	0	0
Notes: _										
210/3:Re Conc Pier Wall	ft	59	71	42	19	11	10	6	0	0
1080/3:Delamination/Spall/Patched Area	ft	12	0	0	50	6	50	6	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
215/3:Re Conc Abutment	ft	59	95	56	5	3	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
330/2:Metal Bridge Railing	ft	203	100	203	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	203	94	191	6	12	0	0	0	0
1130/2:Cracking (RC and Other)	ft	12	0	0	46	12	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Alert Code 1: Six feet of spall with exposed rebar on east pier in the bearing area. Minor cracking above west pier in concrete box girder.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-122-06.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Local
04 City	WALTERS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PIPESTEM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH 2 WEST EDMUNDS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 14' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 01' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	498176.7 5231876.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1984 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	35 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	March 26, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	59 Ft.	Other Special	N
49 Structure Length	62.99 Ft.	218 Channel Profile	1 48 06/12/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.2 Ft.	213 Federal Aid Project Number	BRO-47(2)
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-122-06.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,927	100	1,927	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	253	100	253	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	97	60	3	2	0	0	0	0
1130/3:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
Notes: _										
331/2:Re Conc Bridge Railing	ft	125	79	99	21	26	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes: _										
1090/2:Exposed Rebar	ft	3	0	0	100	3	0	0	0	0
Notes: _										
1130/2:Cracking (RC and Other)	ft	22	0	0	100	22	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	0	0	0	0	0	0	100	2
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Snowplow damage to SW corner. SW Jersey barrier 1' X1' spall, 1 inch deep. Minor cracking on jersey barrier. 1 bridge end marker is down.

Alert Code 1: Erosion under both abutments, pilings are visible.*

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-122-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Local
04 City	PIPESTEM VALLEY TOWN	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PIPESTEM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 1 SOUTH EDMUNDS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 14' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 01' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	498721.2 5231305.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 42 76 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1978 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	March 26, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.6 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 06/12/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	27.6 Ft.	213 Federal Aid Project Number	SOS-47(3)
52 Deck Width	28.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-122-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	351	96	338	4	13	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	13	0	0	100	13	0	0	0	0
Notes: _										
215/3:Re Conc Abutment	ft	56	45	25	55	31	0	0	0	0
1130/3:Cracking (RC and Other)	ft	31	0	0	100	31	0	0	0	0
330/2: Metal Bridge Railing	ft	98	0	0	100	98	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3420/2:Peel/Bub/Crack(Stl Protect Co)	sq.ft	100	0	0	100	100	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0

Remarks: Minor cracking and spalls on deck. Minor cracking on wings. Moderate longitudinal crack SE wingwall Spall, 1'x1', on south abutment, 3rd beam from east under bearing. There are also two other small spalls there. Spall on top corner of SE wingwall. Small spall east beam.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-123-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	87.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Local
04 City	PIPESTEM VALLEY TOWN	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PIPESTEM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 3 NORTH PINGREE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 12' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 59' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	500327.7 5228825.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 38 69 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 13 25 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	24 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	5 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	March 26, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 06/12/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.8 Ft.	213 Federal Aid Project Number	BRO-47(9)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Belanger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-123-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	5,038	100	5,038	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	200	100	200	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	95	59	5	3	0	0	0	0
1130/3:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
Notes:_										
331/2:Re Conc Bridge Railing	ft	98	88	86	12	12	0	0	0	0
1130/2:Cracking (RC and Other)	ft	12	0	0	100	12	0	0	0	0
Notes:_										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 1 bridge endmarker down.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-125-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Local
04 City	PINGREE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PIPESTEM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 3 WEST PINGREE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 11' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 58' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	502142.4 5227043.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 51 92 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	March 26, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	58 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 06/12/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.5 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.8 Ft.	213 Federal Aid Project Number	BRO-47(7)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Belanger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-125-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,851	84	1,551	16	300	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	300	0	0	100	300	0	0	0	0
Notes: _										
104/2:Pre Clsd Box Girder	ft	230	100	230	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	0	0	100	62	0	0	0	0
331/2:Re Conc Bridge Railing	ft	118	81	96	19	22	0	0	0	0
1130/2:Cracking (RC and Other)	ft	22	0	0	100	22	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	0	0	50	1	0	0	50	1
8401/3:Wings	each	4	0	0	50	2	50	2	0	0

Alert Code 1: 2 piling exposed on north end of west abutment. NE wing has moved in 1 1/2". NW wing 1" All wings have cracking.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-126-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	87.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Local
04 City	PLAINVIEW TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PIPESTEM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH 1 WEST PINGREE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 06' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 56' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	504784.2 5217370.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 31 57 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 26 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	50 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	March 26, 2018
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	58 Ft.	218 Channel Profile	1 48 06/12/2019
49 Structure Length	60.04 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-126-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	479	100	479	0	0	0	0	0	0
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	59	98	58	0	0	0	0	2	1
7000/2:Damage	ft	1	0	0	0	0	0	0	100	1
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	121	100	121	0	0	0	0	0	0
332/2:Timb Bridge Railing	ft	59	0	0	0	0	0	0	100	59
1140/2:Decay/Section Loss	ft	59	0	0	0	0	0	0	100	59
Notes: _										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	0	0	0	0	100	4	0	0
1150/3:Check/Shake	each	4	0	0	0	0	100	4	0	0
Notes: _										

Remarks: Concrete bridge rail posts on south side are broken with steel exposed. Ice damage on NW & NE corners of backwalls. One pile in NE wing broken off. 1 new pile on the SW wingwall. 4/2016 - Remaining 2 piling on NE wing, 1 on SE, 1 on SW and 3 on NW wingwalls have the center rotted out. 1 board missing on SE wing wall.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-127-18.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	70.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Major Collector
04 City	PLAINVIEW TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04718 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PIPESTEM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST OF BUCHANAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	9.698	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 03' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 55' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	506147.0 5212540.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	6 Bituminous	64 Oper. Rating	HS 35 64 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 10 19 Tons
208 Dk Overburden	302 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1960 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	140 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	13.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	14 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	3 SC - Unstable
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	April 23, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.3 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 06/12/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	24.3 Ft.	213 Federal Aid Project Number	CS-490(4)
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-127-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,292	100	1,292	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	1,292	100	1,292	0	0	0	0	0	0
110/3:Re Conc Opn Girder/Beam	ft	249	100	249	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	52	90	47	8	4	2	1	0	0
1120/3:Efflorescence/Rust Staining	ft	1	0	0	100	1	0	0	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	4	0	0	75	3	25	1	0	0
Notes: _										
330/2:Metal Bridge Railing	ft	98	0	0	100	98	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
Notes: _										
331/2:Re Conc Bridge Railing	ft	98	96	94	0	0	1	1	3	3
1080/2:Delamination/Spall/Patched Area	ft	3	0	0	0	0	0	0	100	3
Notes: _										
1090/2:Exposed Rebar	ft	1	0	0	0	0	100	1	0	0
Notes: _										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: 1 1/2" of asphalt on deck. Minor scour on upstream side. Both abutments tipped out about 1/2 inch at the top.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-128-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Local
04 City	HIDDEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PIPESTEM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 3 WEST BUCHANAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 01' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 53' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	508354.4 5207076.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 36 65 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 39 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1973 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	April 17, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.6 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/09/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	09/18/2017
	24.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-128-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	200	100	200	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	52	31	16	69	36	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	5	0	0	100	5	0	0	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	31	0	0	100	31	0	0	0	0
Notes: _										
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	49	98	48	2	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes: _										
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes: _										

Remarks: 4/2016 - Map cracking on all wings.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-129-24.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Local
04 City	HIDDEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PIPESTEM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 SOUTH 2 WEST BUCHANAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 59' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 52' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	510108.1 5203508.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 53 96 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 34 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1973 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	March 22, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	61 Ft.	Other Special	N
49 Structure Length	189.96 Ft.	218 Channel Profile	1 48 06/12/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 47-129-24.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	1,900	100	1,900	0	0	0	0	0	0
205/3:Re Conc Column	each	4	75	3	25	1	0	0	0	0
1130/3:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
215/1:Re Conc Abutment	ft	59	88	52	12	7	0	0	0	0
1130/1:Cracking (RC and Other)	ft	7	0	0	117	7	0	0	0	0
Notes: _										
234/1:Re Conc Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	381	100	381	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	381	87	333	13	48	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes: _										
1130/2:Cracking (RC and Other)	ft	46	0	0	230	46	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor popouts on top of beams. Some minor cracks on beams. Moderate concrete breakout north abutment headwall by both wingwalls.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-130-05.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Major Collector
04 City	EDMUNDS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04706 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST OF EDMUNDS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	29.693	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 15' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 51' 26.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	510815.1 5233498.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	92 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	41 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1977 106 Yr Reconstructed -1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	50 30 Year of ADT 2018	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 1
19 Bypass, Detour Length	10 Miles	113 Scour Critical	7 Countermeasures
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 24, 2018
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	58 Ft.	218 Channel Profile	1 48 06/12/2019
49 Structure Length	61.02 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	ROS-4706(52)
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 47-130-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,841	94	1,721	7	120	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	120	0	0	100	120	0	0	0	0
Notes: _										
104/1:Pre Clsd Box Girder	ft	243	100	243	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	59	0	0	100	59	0	0	0	0
1130/3:Cracking (RC and Other)	ft	59	0	0	100	59	0	0	0	0
Notes: _										
330/1:Metal Bridge Railing	ft	121	100	121	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	121	75	91	25	30	0	0	0	0
1130/1:Cracking (RC and Other)	ft	30	0	0	200	30	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	0	0	75	3	0	0	25	1

Remarks: Minor popouts & cracking on deck. Minor cracks in both abutments. Horizontal cracking on all 4 wingwalls. Minor erosion SE & SW wingwalls. Old beaver chewings on multiple guardrail posts. Moderate eroison NE & NW wingwalls.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-130-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Local
04 City	HIDDEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PIPESTEM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH 2 WEST BUCHANAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 00' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 51' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	510375.4 5206093.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 53 96 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 34 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1973 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	55 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	March 22, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	61 Ft.	Other Special	N
49 Structure Length	189.96 Ft.	218 Channel Profile	1 48 06/12/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 47-130-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	1,900	99	1,888	1	12	0	0	0	0
1130/1:Cracking (RC and Other)	ft	12	0	0	100	12	0	0	0	0
Notes: _										
205/3:Re Conc Column	each	4	100	4	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	59	95	56	5	3	0	0	0	0
1130/1:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
Notes: _										
234/1:Re Conc Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	381	100	381	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	381	96	364	5	17	0	0	0	0
1130/2:Cracking (RC and Other)	ft	17	0	0	170	17	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Moderate spalls NW, SW, & SE wingwalls by outside beams. Moderate cracking on diaphragms over piers.
 Minor erosion NW & SE corners of bridge. 4/2016 - 12' of map cracking on side of NW beam.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-131-39.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	26.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Local
04 City	LENTON TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 2 WEST OF SYDNEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 46' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 49' 07.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	513846.9 5179395.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 2 5 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 1 3 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	100 None	209 Posted in "Tons"	04 Tons
Age and Service		Appraisal	
27 Yr Built	1927 106 Yr Reconstructed -1	67 Structural Condition	0 Closed
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	10 30 Year of ADT 2018	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	March 27, 2018
32 Approach Roadway Width	13 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 04/30/2014
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.4 Ft.	Other Special	N
48 Length of Max Span	31 Ft.	218 Channel Profile	1 48 05/09/2017
49 Structure Length	33.14 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 47-131-39.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	592	0	0	0	0	100	592	0	0
1150/1:Check/Shake	sq.ft	592	0	0	0	0	100	592	0	0
Notes:_										
113/2:Steel Stringer	ft	164	0	0	100	164	0	0	0	0
1000/2:Corrosion	ft	159	0	0	100	159	0	0	0	0
Notes:_										
1900/2:Distortion	ft	5	0	0	100	5	0	0	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
Notes:_										
120/2:Steel Truss	ft	66	0	0	0	0	100	66	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
Notes:_										
152/2:Steel Floor Beam	ft	20	0	0	0	0	100	20	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/2:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
Notes:_										
202/3:Steel Column	each	10	0	0	100	10	0	0	0	0
1000/3:Corrosion	each	10	0	0	100	10	0	0	0	0
Notes:_										
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/3:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
Notes:_										
216/3:Timber Abutment	ft	36	0	0	100	36	0	0	0	0
1150/3:Check/Shake	ft	36	0	0	100	36	0	0	0	0
Notes:_										
330/3:Metal Bridge Railing	ft	66	0	0	100	66	0	0	0	0
1000/3:Corrosion	ft	61	0	0	100	61	0	0	0	0
Notes:_										
1900/3:Distortion	ft	5	0	0	100	5	0	0	0	0
Notes:_										
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
332/3:Timb Bridge Railing	ft	66	0	0	0	0	100	66	0	0
1170/3:Split/Delamination (Timber)	ft	66	0	0	0	0	100	66	0	0
Notes:_										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-131-39.0

Remarks: Pack rust evident on U-1 right side. Moderate rust on all steel members. Differential settlement SW corner higher than other corners. Large Beaver dam under structure. Erosion behind SW wingwall. 4/2016 - SW wing wall is tipping. 7/11/2017 - Bridge closed pending repairs. 3/27/18 - Bridge still closed. 7/17/2019 - County requested we remove from inventory but will leave in and closed until removed - nmh

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-135-18.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Major Collector
04 City	JIM RIVER VALLEY TOW	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04718 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST OF BUCHANAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	17.596	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 04' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 45' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	518659.7 5212785.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 34 62 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 15 29 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	196 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	13.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	20 Miles	36 Traffic Safety Features	1 0 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	March 27, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	65 Ft.	Other Special	N
49 Structure Length	134.84 Ft.	218 Channel Profile	1 48 05/09/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.2 Ft.	213 Federal Aid Project Number	CBRS-4718(51)
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-135-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,155	100	4,155	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	541	100	541	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	269	89	238	12	31	0	0	0	0
1130/2:Cracking (RC and Other)	ft	31	0	0	100	31	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: SW guardrail end treatment is broken loose from the break away bases. All safety shapes have settled.

Alert Code 1: Erosion under both abutments.* 1 piling exposed on the west abutment and 2 on the east abutment.

Alert Code 2: Safety shapes are settling due to erosion. Misalignment is causing a hazard to on coming traffic.*

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-135-29.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	71.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Major Collector
04 City	MIDWAY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04728 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PIPESTEM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	WEST SIDE OF JAMESTOWN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.498	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 44' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	520124.5 5195757.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 20 36 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 12 22 Tons
208 Dk Overburden	303 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1969 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	4 Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	450 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	3 Intolerable - Correct
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	March 22, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.3 Ft.	Underwater	N
48 Length of Max Span	59 Ft.	Other Special	N
49 Structure Length	61.02 Ft.	218 Channel Profile	09/18/2012
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	07/07/2017
	25.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-135-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	548	100	547	0	1	0	0	0	0
215/3:Re Conc Abutment	ft	52	94	49	6	3	0	0	0	0
330/2:Metal Bridge Railing	ft	102	95	97	0	0	5	5	0	0
7000/2:Damage	ft	5	0	0	0	0	100	5	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	115	71	82	29	33	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Approach rail SW corner has vehicle collision damage. Roadway settlement both ends of the bridge. Spall on east girder.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-136-41.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Major Collector
04 City	SYDNEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04742 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST OF SYDNEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	35.293	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 43' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 43' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	520606.6 5175466.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 42 77 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 15 29 Tons
208 Dk Overburden	202 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1970 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	55 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	13.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	14 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	March 27, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	78 Ft.	Other Special	N
49 Structure Length	80.05 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.5 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	ER-147(3)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Belanger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-136-41.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	801	100	801	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	161	100	161	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	161	94	152	6	9	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor cracks on SE wingwall. Minor cracks on curb.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-141-43.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Major Collector
04 City	MONTPELIER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04742 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF MONTPELIER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	42.591	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 42' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 37' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	528878.2 5172149.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 52 95 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	302 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1962 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	210 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	13.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	1 0 0 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	April 02, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	58 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	1 48 05/09/2017
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	27.2 Ft.	213 Federal Aid Project Number	CS-83(3)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Rowell, Belanger
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 47-141-43.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	541	100	539	0	2	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes: _										
215/3:Re Conc Abutment	ft	52	42	22	50	26	8	4	0	0
1130/3:Cracking (RC and Other)	ft	30	0	0	87	26	13	4	0	0
Notes: _										
331/2:Re Conc Bridge Railing	ft	121	88	106	12	15	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	7	0	0	100	7	0	0	0	0
Notes: _										
1130/2:Cracking (RC and Other)	ft	8	0	0	100	8	0	0	0	0
Notes: _										
4000/2:Settlement	each	1	0	0	100	1	0	0	0	0
8398/3:Slope Protection	each	2	0	0	50	1	0	0	50	1
8401/3:Wings	each	4	50	2	50	2	0	0	0	0

Remarks: SW end post is broken with exposed steel. Damage to north guardrail. Roadway settlement west end of the bridge. Popouts on beams midspan. the county placed flowable fill behind the wingwalls.

Alert Code 1: West abutment is tilted inward 16 inches at the northwest wingwall top.*4/2/18 west abutment is now tilted 17". Extreme collision damage to NE guardrails.* East abutment is tilted inward 4 inches at NE corner. There is some movement of the bridge at breastwall of beam seats, in this case 4 1/2 inches east and 16 inches west.*

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-142-44.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Major Collector
04 City	MONTPELIER CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04742 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	IN MONTPELIER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	43.991	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 42' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 35' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	531039.2 5171951.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 15 28 Tons
208 Dk Overburden	302 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1969 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	150 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	13.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	April 02, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	78 Ft.	Other Special	N
49 Structure Length	80.05 Ft.	218 Channel Profile	1 48 05/09/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-142-44.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	801	100	801	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	87	54	13	8	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	8	0	0	100	8	0	0	0	0
Notes: _										
330/1:Metal Bridge Railing	ft	161	91	146	9	15	0	0	0	0
7000/1:Damage	ft	15	0	0	100	15	0	0	0	0
Notes: _										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	161	95	153	5	8	0	0	0	0
1130/1:Cracking (RC and Other)	ft	8	0	0	100	8	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Collision damage to 15 LF of bridge rail. Minor cracking on wings. Minor collision damage to bridge railing.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-142-45.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Local
04 City	MONTPELIER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF MONTPELIER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 40' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 35' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	531531.4 5169068.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 22 40 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	March 28, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	80 Ft.	Other Special	N
49 Structure Length	83.99 Ft.	218 Channel Profile	1 48 05/09/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	27.9 Ft.	213 Federal Aid Project Number	BRO-47(13)
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-142-45.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,573	100	2,573	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	335	100	335	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	89	55	11	7	0	0	0	0
1130/3:Cracking (RC and Other)	ft	7	0	0	100	7	0	0	0	0
Notes: _										
331/1:Re Conc Bridge Railing	ft	167	56	94	44	73	0	0	0	0
1090/1:Exposed Rebar	ft	33	0	0	100	33	0	0	0	0
Notes: _										
1130/1:Cracking (RC and Other)	ft	40	0	0	100	40	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor cracks on jersey barrier. Minor popouts on deck. Insufficient clearance barrier wall rebar is causing the rebar to be exposed on both barriers. Dirt is 1" below the bottom of the west abutment.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-143-32.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	73.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Local
04 City	HOMER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 NORTH OF YPSILANTI	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 51' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 34' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	532864.6 5190031.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 30 54 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 26 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1962 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	130 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	13.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	April 17, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.6 Ft.	Underwater	N
48 Length of Max Span	44 Ft.	Other Special	N
49 Structure Length	89.90 Ft.	218 Channel Profile	1 48 05/09/2017
50 Curb/Sidewalk Widths	2.6 Ft Rt-Side	Chaining Date	None
	2.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	24.6 Ft.	213 Federal Aid Project Number	CS-622(6)
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 47-143-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	810	98	790	0	0	3	20	0	0
210/3:Re Conc Pier Wall	ft	30	90	27	10	3	0	0	0	0
1130/3:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
Notes: _										
215/3:Re Conc Abutment	ft	56	89	50	9	5	2	1	0	0
1130/3:Cracking (RC and Other)	ft	6	100	6	0	0	0	0	0	0
Notes: _										
331/2:Re Conc Bridge Railing	ft	180	99	179	1	1	0	0	0	0
1130/2:Cracking (RC and Other)	ft	1	0	0	100	1	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	0	0	0	0	0	0	100	2
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor cracking above pier on box beam. Longitudinal crack N 3 box beam west span on top. East abutment is tilted in 1 inch in 4 ft. Inward movement SE corner 3.25 inches; NE corner 3.75 inches. West abutment appears to have moved laterally 3.75 inches but remains plumb. Longitudinal crack on top of the box beam. 4/2016 - Could not find the longitudinal crack on beams. Gravel on deck. 4/17/2018 - SE = 4", NE = 4.5", SW = 4", NW = 4.75"

Alert Code 1: Some cracking top of pier at south end.*

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-143-37.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	82.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Major Collector
04 City	CORWIN TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04736 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	IN YPSILANTI	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	66.986	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 47' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 34' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	532756.1 5181965.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	41 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	25 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	17 Tons
Age and Service		Appraisal	
27 Yr Built	1959 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	220 30 Year of ADT 2018	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	1 1 1 1
19 Bypass, Detour Length	12 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 24, 2018
32 Approach Roadway Width	23 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	54 Ft.	218 Channel Profile	1 48 06/13/2019
49 Structure Length	109.91 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	05/26/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	CS 84(3)
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-143-37.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,863	0	0	100	2,863	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	2,863	0	0	100	2,863	0	0	0	0
107/3:Steel Opn Girder/Beam	ft	440	0	0	100	438	1	2	0	0
1000/3:Corrosion	ft	438	0	0	100	438	0	0	0	0
Notes: _										
1020/3:Connection	ft	2	0	0	0	0	100	2	0	0
Notes: _										
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3420/3:Peel/Bub/Crack(Stl Protect Co	sq.ft	100	0	0	100	100	0	0	0	0
Notes: _										
202/3:Steel Column	each	12	0	0	100	12	0	0	0	0
1000/3:Corrosion	each	9	0	0	100	9	0	0	0	0
Notes: _										
7000/3:Damage	each	3	0	0	100	3	0	0	0	0
Notes: _										
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/3:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
Notes: _										
219/3:Stl Abutment	ft	52	0	0	0	0	100	52	0	0
Notes: _										
1000/3:Corrosion	ft	52	0	0	0	0	100	52	0	0
Notes: _										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
Notes: _										
3430/3:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	0	0	100	100	0	0
Notes: _										
231/3:Steel Pier Cap	ft	79	0	0	100	79	0	0	0	0
1000/3:Corrosion	ft	79	0	0	100	79	0	0	0	0
Notes: _										
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/3:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
Notes: _										
330/2:Metal Bridge Railing	ft	220	100	220	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	220	94	207	6	13	0	0	0	0
1130/2:Cracking (RC and Other)	ft	13	0	0	108	13	0	0	0	0
Notes: _										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-143-37.0

Remarks: Minor rusting of steel at water line. Moderate damage to paint system. Minor cracks in deck. Deadman anchors installed on both north wingwalls. Both 17 ton load limit signs are missing. Minor impact damage to the north column of the pier. 4/2016 - SE wingwall cross brace is rusted thru. Moderate erosion NE, NW, SW wingwalls.

Alert Code 1: East abutment north piling is bent inward and has sheared the bolts from the north beam, due to the tilting of the NE wingwall.*

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-143-39.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Rural, Major Collector
04 City	YPSILANTI TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04741 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF YPSILANTI	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.099	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	46d 46' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 33' 52.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	533255.4 5179341.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 32 59 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 20 36 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	95 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	13.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	April 02, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	58 Ft.	Other Special	N
49 Structure Length	162.00 Ft.	218 Channel Profile	1 48 01/01/2000
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/21/2017
	28.0 Ft.	213 Federal Aid Project Number	CNOC-BRC-4741(051)
52 Deck Width	30.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	2 In-Place, Functioning
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 47-143-39.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	4,860	100	4,860	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	648	100	648	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	60	100	60	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	60	100	60	0	0	0	0	0	0
313/2:Fixed Bearing	each	16	100	16	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	324	100	324	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: JMTN01

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	58.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Urban, Minor Arterial
04 City	JAMESTOWN CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	08720 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4TH AVE. NW-JAMESTOWN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.962	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 42' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	521865.2 5196056.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	—	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete continuous	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 39 71 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 15 28 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1947 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	2 Intolerable - Replace
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	4 Tolerable
29 ADT	3,050 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	3.00	36 Traffic Safety Features	0 0 0 1
19 Bypass, Detour Length	1 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 21, 2017
32 Approach Roadway Width	25 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	29 Ft.	218 Channel Profile	Y 48 05/22/2015
49 Structure Length	62.01 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	6.9 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	33.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Carlson, Belanger
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: JMTN01

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,485	92	1,371	0	0	8	114	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	114	0	0	0	0	100	114	0	0
Notes: _										
110/1:Re Conc Opn Girder/Beam	ft	289	99	287	0	0	1	2	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	0	0	100	1	0	0
Notes: _										
1090/1:Exposed Rebar	ft	1	0	0	0	0	100	1	0	0
Notes: _										
210/3:Re Conc Pier Wall	ft	33	94	31	3	1	3	1	0	0
1130/3:Cracking (RC and Other)	ft	2	0	0	50	1	50	1	0	0
Notes: _										
215/3:Re Conc Abutment	ft	66	74	49	8	5	18	12	0	0
1080/3:Delamination/Spall/Patched Area	ft	12	0	0	0	0	100	12	0	0
Notes: _										
1090/3:Exposed Rebar	ft	5	0	0	100	5	0	0	0	0
Notes: _										
330/1:Metal Bridge Railing	ft	125	98	123	2	2	0	0	0	0
1000/1:Corrosion	ft	2	0	0	100	2	0	0	0	0
Notes: _										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	100	0	0	0	0	100	100	0	0
Notes: _										
331/1:Re Conc Bridge Railing	ft	125	94	117	0	0	6	8	0	0
1080/1:Delamination/Spall/Patched Area	ft	8	0	0	0	0	100	8	0	0
Notes: _										
8398/3:Slope Protection	each	2	0	0	0	0	0	0	100	2
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Spalls at metal rail anchor points. Spalling on deck. Spalling on soffit with exposed rebar.**Alert Code 1:** Abutments have spalling with exposed steel all 4 corners.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: JMTN02

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	88.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Urban, Minor Arterial
04 City	JAMESTOWN CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	08760 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	12TH AVE. SE-JAMESTOWN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.050	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 41' 24.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	523630.6 5193153.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 29 52 Tons
208 Dk Overburden	36 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	10 Tons
27 Yr Built	1965 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	1,825 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	July 11, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	89.90 Ft.	218 Channel Profile	Y 48 05/22/2015
50 Curb/Sidewalk Widths	1.6 Ft Rt-Side	Chaining Date	None
	4.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	09/01/2009
	28.2 Ft.	213 Federal Aid Project Number	CS 910(1)
52 Deck Width	34.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Wegner, Carlson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: JMTN02

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,551	100	2,551	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	2,551	100	2,551	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	945	93	883	7	62	0	0	0	0
1120/1:Efflorescence/Rust Staining	ft	62	0	0	100	62	0	0	0	0
Notes:Span 1: 10' of leaching between girder 1 and 2, 12' of leaching between girder 2 and 3. Span 2: 40' of leaching between girder 2 and 3. - 7/11/2019										
210/3:Re Conc Pier Wall	ft	33	94	31	6	2	0	0	0	0
1130/3:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
Notes:2' of cracking near middle of pier wall - 7/11/2019										
215/2:Re Conc Abutment	ft	69	45	31	55	38	0	0	0	0
1130/2:Cracking (RC and Other)	ft	45	16	7	84	38	0	0	0	0
Notes:South abutment: 35' of CS 2 map cracking, North Abutment: 7' of CS 1 cracking and 3' of CS 2 - 7/11/2019										
234/1:Re Conc Pier Cap	ft	33	85	28	15	5	0	0	0	0
330/1:Metal Bridge Railing	ft	180	100	180	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
Notes:50% of the protective coating is effective - 7/11/2019										
3430/1:Ox Flm/Txt Adhr(Stl Prot Coat)	sq.ft	50	0	0	0	0	100	50	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	50	0	0	0	0	100	50	0	0
331/1:Re Conc Bridge Railing	ft	180	98	177	2	3	0	0	0	0
1090/1:Exposed Rebar	ft	3	0	0	100	3	0	0	0	0
Notes:3' of exposed rebar on East curb - 7/11/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:Slope protection is covered with sediment - 7/11/2019										
8401/2:Wings	each	4	50	2	50	2	0	0	0	0
1130/2:Cracking (RC and Other)	each	3	33	1	67	2	0	0	0	0
Notes:Both South wings have cracking in a CS 2, NW wing has cracking in a CS 1 - 7/11/2019										

Remarks: Curb & railings are substandard. Posted for 10 tons. Rdwy settlement both ends of bridge. Approximately 8" of asphalt on deck. - 7/11/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: JMTN03

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Urban, Collector
04 City	JAMESTOWN CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08757 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location 2ND STREET SW-JAMESTOWN		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.940	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 43' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 521726.1 5194945.3		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type 1 Concrete-Cast-in-Place		63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface 1 Monolithic Concrete		64 Oper. Rating HS 55	99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating HS 28	52 Tons
208 Dk Overburden 1	None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1986 106 Yr Reconstructed -1		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	4 Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 2,500 30 Year of ADT 2018		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	4.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	48 Ft.	90 Date of Last Inspection	November 07, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	80 Ft.	Other Special	N
49 Structure Length	83.99 Ft.	218 Channel Profile	Y 48 04/10/2014
50 Curb/Sidewalk Widths	4.6 Ft Rt-Side	Chaining Date	None
	4.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	29.9 Ft.	213 Federal Aid Project Number	BRM-2-987(06)010
52 Deck Width	42.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Rowell, Carlson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: JMTN03

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,519	97	2,444	3	75	0	0	0	0
104/1:Pre Clsd Box Girder	ft	479	100	479	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	85	100	85	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	161	95	153	5	8	0	0	0	0
1130/1:Cracking (RC and Other)	ft	23	65	15	35	8	0	0	0	0
Notes:_										
8398/3:Slope Protection	each	2	0	0	0	0	0	0	100	2
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor cracking on bridge rail. Conc. Rail on approach has settled on all 4 corners of structure.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: JMTN04

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	88.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Valley City District	22 Owner	City/Municipal Hwy Agenc
03 County	Stutsman	26 Functional	Urban, Collector
04 City	JAMESTOWN CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08757 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location 1ST STREET SW JAMESTOWN		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 42' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 521760.9 5195040.8		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type 1 Concrete-Cast-in-Place		63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface 1 Monolithic Concrete		64 Oper. Rating HS 55	99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect 1 Epoxy Coated Reinforci		66 Inv. Rating HS 34	62 Tons
208 Dk Overburden 1	None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 2005 106 Yr Reconstructed		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 1,045 30 Year of ADT 2019		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	48 Ft.	90 Date of Last Inspection	July 15, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	39 Ft.	Other Special	N
49 Structure Length	118.11 Ft.	218 Channel Profile	Y 48 04/22/2015
50 Curb/Sidewalk Widths	6.9 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	29.9 Ft.	213 Federal Aid Project Number	AC-SU-2-987(026)030
52 Deck Width	40.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Carlson, Wegner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: JMTN04

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/2:Re Concrete Deck	sq.ft	3,745	96	3,595	4	150	0	0	0	0
1130/2:Cracking (RC and Other)	sq.ft	150	0	0	100	150	0	0	0	0
Notes:Cracking throughout deck. - 7/15/2019										
520/2:Conc Re Prot Sys	sq.ft	3,745	100	3,745	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	577	100	577	0	0	0	0	0	0
210/2:Re Conc Pier Wall	ft	83	100	83	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	91	100	91	0	0	0	0	0	0
1130/2:Cracking (RC and Other)	ft	4	100	4	0	0	0	0	0	0
Notes:Cracking on west abutment. - 7/15/2019										
313/1:Fixed Bearing	each	15	100	15	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	237	100	237	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	237	95	226	5	11	0	0	0	0
1130/2:Cracking (RC and Other)	ft	11	0	0	100	11	0	0	0	0
Notes:South rail has 4 and the north rail has 7 cracks. - 7/15/2019										
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Need approach slabs add to elements the West approach slab is 852 sq ft and the East approach slab is 792 sq ft. - 7/15/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: JMTN05

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Urban, Local
04 City	JAMESTOWN CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3RD ST. NW-JAMESTOWN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 54' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 42' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	521800.6 5195263.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Concrete continuous	61 Chan. & Chan. Protection	8 Protected
Slab		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 33 59 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1997 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	1,122 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	4.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	July 15, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	36 Ft.	Other Special	N
49 Structure Length	104.99 Ft.	218 Channel Profile	Y 48 05/22/2015
50 Curb/Sidewalk Widths	5.9 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	27.9 Ft.	213 Federal Aid Project Number	BRO-47(17)
52 Deck Width	36.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Carlson, Wegner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: JMTN05

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	3,832	100	3,822	0	10	0	0	0	0
1120/3:Efflorescence/Rust Staining	sq.ft	10	0	0	100	10	0	0	0	0
Notes:10' of efflorescence on bottom of deck on span 1. - 7/15/2019										
520/3:Conc Re Prot Sys	sq.ft	3,832	100	3,832	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	69	100	69	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	72	100	72	0	0	0	0	0	0
321/2:Re Conc Approach Slab	sq.ft	100	80	80	20	20	0	0	0	0
1080/2:Delamination/Spall/Patched Area	sq.ft	7	0	0	100	7	0	0	0	0
Notes:East approach slab has 2 sf and the West approach slab has 5 sf of spall. (See pic.) - 7/15/2019										
1130/2:Cracking (RC and Other)	sq.ft	13	0	0	100	13	0	0	0	0
Notes:Cracking on east approach slab. - 7/15/2019										
330/2:Metal Bridge Railing	ft	315	100	315	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	70	70	30	30	0	0	0	0
3410/2:Chalk(Steel Protect Coatings)	sq.ft	30	0	0	100	30	0	0	0	0
Notes:Surface dulling throughout railing. - 7/15/2019										
331/3:Re Conc Bridge Railing	ft	210	94	197	6	13	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:1x1 spall on the NE corner by joint. - 7/15/2019										
1130/3:Cracking (RC and Other)	ft	19	37	7	63	12	0	0	0	0
Notes:South rail has 2 CS1 and 9CS2. North rail has 5 CS1 and 3 CS2. - 7/15/2019										
8398/3:Slope Protection	each	2	0	0	0	0	0	0	100	2
Notes:Slope protection is nonexistent. - 7/15/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: JMTN06 B

200 System Designation	4 - Urban	Classification	
201 Status		12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	-2.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Urban, Collector
04 City	JAMESTOWN CITY	37 Historical Significance	Unknown (NBI)
05 Inventory Route	One Route Under	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08740 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect NSF RAILROAD UNDERPASS		102 Direction of Traffic	2 2-way traffic
09 Location	4TH AVE. NE-JAMESTOWN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.100	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Unknown
16 Latitude	46d 54' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 42' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 522542.4 5195152.8		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	
Structure Type and Material		60 Substructure	
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	
Slab		62 Culvert and Retaining Walls	
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	-1		Unknown
46 No. Approach Spans	-1	41 Structure Open, Closed or Posted	Unknown (NBI)
107 Deck Struct Type	Unknown (NBI)	63 Operating Rating Method	Unknown (NBI)
108 Wearing Surface	Unknown (NBI)	64 Oper. Rating	HS
Membrane	Unknown (NBI)	65 Inventory Rating Method	Unknown (NBI)
Dk Protect	Unknown (NBI)	66 Inv. Rating	HS
208 Dk Overburden 1	None	70 Bridge Posting	Unknown (NBI)
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built 1917 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	2 Railroad - On	67 Structural Condition	
	1 Highway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	3 Intolerable - Correct
29 ADT 9,100 30 Year of ADT 2009		71 Waterway Adequacy	
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	Unknown (NBI)
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance	12 Ft. 12 In.	Inspections	
32 Approach Roadway Width	48 Ft.	90 Date of Last Inspection	November 28, 2017
33 Bridge Median	Unknown (NBI)	91 Designated Inspection Frequency	24 Months
34 Skew	-1.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
35 Structure Flared	Unknown (NBI)	Fracture Critical	N
47 Total Horizontal Clearance	18.0 Ft.	Underwater	N
48 Length of Max Span	18 Ft.	Other Special	N
49 Structure Length	119.09 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	-1.0 Ft Rt-Side	Chaining Date	None
	-1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	-1.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	Ft. In.	216 Inspector	Rowell, Belanger
54 Min Vert Underclearance	12 Ft. 11 In.	Navigation Data	
	H Hwy beneath struct	38 Navigation Control	Unknown (NBI)
55 Min Lateral UnderClear. - Rt	3.0 Ft.	39 Navigation Vertical Clearance	Ft.
	H Hwy beneath struct	40 Navigation Horizontal Clearance	Ft.
56 Min Lateral UnderClear. - Lt	3.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: JMTN06 B

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
205/2:Re Conc Column	each	54	20	11	54	29	26	14	0	0
215/2:Re Conc Abutment	ft	340	0	0	100	340	0	0	0	0
234/1:Re Conc Pier Cap	ft	361	90	323	11	38	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: 4' x 20' soffit has spalled off with exposed rebar. 51' of spalls on abutment headwall.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: JMTN08

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	73.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Urban, Collector
04 City	JAMESTOWN CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08766 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	SOUTH OF I-94 ON CORP LIM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.850	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 53' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 40' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 525040.3 5192247.6		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 27 48 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 12 22 Tons
208 Dk Overburden 33	Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1968 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 1,000 30 Year of ADT 2019		71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	3.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	0 0 1 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	July 11, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	89.90 Ft.	218 Channel Profile	Y 48 05/22/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.5 Ft.	213 Federal Aid Project Number	CS-622(7)
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Carlson, Wegner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: JMTN08

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,562	100	2,562	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	2,562	100	2,562	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	879	93	821	7	58	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes:1'x2' spall on ends of beam over pier cap on both east and west sides of bridge. - 7/11/2019										
1110/1:Cracking (PSC)	ft	54	0	0	100	54	0	0	0	0
Notes:21' of crack on the west side of span 2. 14' of crack on the east side of span 2. 4' of crack on west side of span 1. 15' of crack on east side of span 1. - 7/11/2019										
210/3:Re Conc Pier Wall	ft	30	60	18	13	4	27	8	0	0
1120/3:Efflorescence/Rust Staining	ft	6	0	0	33	2	67	4	0	0
Notes:4' of efflorescence on the east side of pier and 2' on the west side of pier. - 7/11/2019										
1130/3:Cracking (RC and Other)	ft	6	0	0	33	2	67	4	0	0
Notes:6' of heavy map cracking on pier wall on east side and 2' of map cracking on pier wall on the west side. - 7/11/2019										
215/2:Re Conc Abutment	ft	59	93	55	7	4	0	0	0	0
1130/2:Cracking (RC and Other)	ft	6	33	2	67	4	0	0	0	0
Notes:North abutment has 1 CS1 and 2 CS2 cracks. South abutment has 1 CS1 and 2 CS2 cracks. - 7/11/2019										
330/1:Metal Bridge Railing	ft	180	100	180	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	180	93	168	7	12	0	0	0	0
1130/1:Cracking (RC and Other)	ft	74	84	62	16	12	0	0	0	0
Notes:West side of rail has 30 CS1 and 5 CS2 cracks. East side of rail has 32 CS1 and 7 CS2 cracks. - 7/11/2019										
8398/2:Slope Protection	each	2	50	1	0	0	0	0	50	1
Notes:North slope protection is nonexistent. - 7/11/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Railings are sub-standard. Approx. 2.5" asphalt overlay on deck. Roadway is settling both ends of the bridge. Bank is eroding SE of the structure. - 7/11/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: JMTN09

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Valley City District	22 Owner	County Hwy Agency
03 County	Stutsman	26 Functional	Urban, Collector
04 City	JAMESTOWN CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	08710 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PIPESTEM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	S. OF 2ND ST SW-JAMESTOWN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.600	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	46d 55' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 44' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	520277.0 5194956.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 20 38 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1992 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	300 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	July 11, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	70 Ft.	Other Special	N
49 Structure Length	74.15 Ft.	218 Channel Profile	Y 48 04/22/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	27.9 Ft.	213 Federal Aid Project Number	BRM-2-980(009)014
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Carlson, Wegner
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: JMTN09

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,067	100	2,067	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	279	100	279	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	59	98	58	2	1	0	0	0	0
1130/2:Cracking (RC and Other)	ft	6	83	5	17	1	0	0	0	0
Notes:1 CS2 crack in north abutment. - 7/11/2019										
331/1:Re Conc Bridge Railing	ft	148	92	136	8	12	0	0	0	0
1130/1:Cracking (RC and Other)	ft	24	50	12	50	12	0	0	0	0
Notes:West rail has 9 CS2 and East rail has 12 CS1 and 3 CS2 cracks throughout railing. - 7/11/2019										
8398/3:Slope Protection	each	2	0	0	0	0	100	2	0	0
Notes:Both slopes are missing rip rap. - 7/11/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Roadway settlement both ends of bridge. NE and NW safety transitions settled 1". Neither seals effective. Slight settlement SE and SW safety transitions.1/2016. - 7/11/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 48-104-39.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Towner	26 Functional	Rural, Local
04 City	SPRINGFIELD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	10 WEST 3 SOUTH CANDO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 26' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 26' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	467499.1 5365669.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	4 Protection Undermined
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 29 53 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1974 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	4 Tolerable
29 ADT	20 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 13, 2018
32 Approach Roadway Width	17 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	25.3 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 07/13/2017
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	09/18/2017
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Trottier, Horn
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 48-104-39.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	279	99	276	0	0	1	3	0	0
7000/1:Damage	ft	279	99	276	0	0	1	3	0	0
206/3:Timber Column	each	10	100	10	0	0	0	0	0	0
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	49	100	49	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 9/14/2001 - Riprap is gone. NBI Remarks: Beam number 8 has spalling with exposed steel at mid span. No railing. Poor channel alignment on south side of bridge. 10/2010 - NO BRIDGE END MARKERS. 10/145/2014 - No bridge end markers. 11/14/2016 - No bridge end markers. 11/13/2018 - No Bridge End Markers.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 48-105-04.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Towner	26 Functional	Rural, Major Collector
04 City	PICTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04804 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HIDDEN ISLAND COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST OF HANSBORO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	4.499	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 56' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 25' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	468823.2 5421946.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	90 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	November 01, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/19/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Trottier, Horn
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 12 X 12 X 52' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 48-105-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	104	100	104	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 48-105-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	38.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Towner	26 Functional	Rural, Local
04 City	MONROE TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BIG COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH 9 WEST ROCK LAKE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 46' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 26' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	467819.3 5402666.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	Unknown (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	Unknown (NBI)
Structure Type and Material		60 Substructure	Unknown (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 29 53 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 17 32 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	24 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1942 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	5 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 23, 2019
32 Approach Roadway Width	17 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.1 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 07/12/2017
49 Structure Length	47.90 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	05/30/2017
51 Bridge Rdwy Width - Curb to Curb	16.1 Ft.	213 Federal Aid Project Number	GERALD SPAETH
52 Deck Width	17.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Freund
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 48-105-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	850	63	536	37	314	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	850	63	536	37	314	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	430	0	0	0	0	89	381	11	49
1000/2:Corrosion	ft	430	0	0	0	0	89	381	11	49
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
210/2:Re Conc Pier Wall	ft	16	0	0	0	0	0	0	100	16
1080/4:Delamination/Spall/Patched Area	ft	16	0	0	0	0	0	0	100	16
215/2:Re Conc Abutment	ft	33	0	0	0	0	0	0	100	33
1080/4:Delamination/Spall/Patched Area	ft	33	0	0	0	0	0	0	100	33
8401/2:Wings	each	4	0	0	50	2	50	2	0	0
1140/2:Decay/Section Loss	each	2	0	0	100	2	0	0	0	0
1900/2:Distortion	each	2	0	0	0	0	100	2	0	0

Remarks: NBI Remarks: Heavy growth of trees on downstream side. Inadequate riprap lacks all signs. 10' of south curb gone. 10' of north curb gone. Erosion behind NW wing wall. Wing wall on NE corner has broken away from abutment. East Abutment tilting out 3.5" in 4'. 9/25/14 no change in tilt on east abutment. Pier tilting to the east 4 1/2" in 4'. there is a 12' 8" x 48' CMP on site. 11/14/2016 - Washout behind NE wing and abutment corner. No change in tilt on East abutment. 10/23/2019 - BRIDGE IS REMOVED AND REPLACED WITH SINGLE 48' X 96" CSP. - 10/23/2019

Alert Code 1: Ne wing tipping 1' of top 4'. section loss through east abut lower portion north side. - 10/23/2019

Alert Code 2: Severe spalling and deterioration of concrete on abutments and pier. Concrete section loss almost thru east abutment. Heavy rust on steel. South outside girder rusted through. 8/8/2012 - Major concrete section loss on West Abutment and Pier. 11/1/2018 - Tilt in the East Abutment is 4 1/2" in 4'. - 10/23/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 48-105-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	65.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Towner	26 Functional	Rural, Local
04 City	MONROE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BIG COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 8 WEST ROCK LAKE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 45' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 25' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	469352.3 5401051.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 28 51 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 31 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	11 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 23, 2019
32 Approach Roadway Width	23 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	29 Ft.	218 Channel Profile	1 48 07/12/2017
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	09/18/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Freund
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 48-105-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/2:Re Conc Opn Girder/Beam	ft	279	100	279	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	49	47	23	0	0	53	26	0	0
1130/3:Cracking (RC and Other)	ft	49	47	23	0	0	53	26	0	0
Notes:Moderate width cracks on both both Abutments from wings going under bridge. - 10/23/2019										
331/2:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor concrete cracking on east abutment. Embankment erosion behind ne wingwall. No load limit posted bridge endmarks on sw corner. Vertical curve east of bridge. 9/25/14 tilt 2 1/2" in 4' on east abutment and still 14" moved in on east abutment. County posted at 11 T per Inspector 7/15/19 nmh - 10/23/2019

Alert Code 1: One foot scour under bridge exposing abutment footings - 10/23/2019

Alert Code 2: 10/2010 - EAST ABUT MOVED IN 10" WITH A TILT OF 2" IN 4'. 8/8/2012 - No change in tilt and East Abutment has moved in 14". 9/25/14 tilt 2 1/2" in 4' on east abutment and still 14" moved in on east abutment. 11/14/2016 - East Abutment has moved in 18" now and No change in tilt. 11/1/2018 - The tilt on the East Abutment is now 3" in 4'. 10/23/2019 - No change in Tilt. - 10/23/2019

Alert Code 3: 11/1/2018 - East Abutment is moving in 18" on SE Corner and 21" on NE Corner. There is movement in the East Abutment 10/23/2019 - No change in movement. - 10/23/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 48-105-41.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	47.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Towner	26 Functional	Rural, Local
04 City	SPRINGFIELD TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 WEST 5 SOUTH CANDO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 25' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 24' 23.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	469944.0 5363572.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Slab		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 9 17 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 6 11 Tons
208 Dk Overburden	203 Gravel/Dirt	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	15 Tons
27 Yr Built	1945 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	2 Intolerable - Replace
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 13, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.3 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	1 48 09/13/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Trottier, Horn
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 48-105-41.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	635	0	0	100	635	0	0	0	0
1170/1:Split/Delamination (Timber)	sq.ft	635	0	0	100	635	0	0	0	0
206/2:Timber Column	each	12	0	0	100	12	0	0	0	0
1150/2:Check/Shake	each	12	0	0	100	12	0	0	0	0
216/3:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/3:Check/Shake	ft	49	0	0	100	49	0	0	0	0
235/2:Timber Pier Cap	ft	52	0	0	100	52	0	0	0	0
1160/2:Crack (Timber)	ft	52	0	0	100	52	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railing.Nw & se bridge end markers. Two cracked timber deck planks.No load limits posted. Four cracked timber planks. 10/2010- -NO BRIDGE END MARKERS. 10/21/2013 - Not Posted for load limit or end markers. 10/15/2014 - No bridge end markers, missing warning sign on North end. 11/13/2018 - Posted Tons signs are down and No Bridge End Markers.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 48-117-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Towner	26 Functional	Rural, Local
04 City	ROCK LAKE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 3 EAST ROCKLAKE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 50' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 11' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	486428.1 5410637.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	3 LRFR Load & Res. Fact
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 26 47 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	3 LRFR Load & Res. Fact
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	59.83 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	06/26/2019
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0048(020)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Ebensteiner, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
QUAD 14 X 7 X 60, PCBC		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 48-117-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
245/1:Pre Concrete Culvert	ft	240	100	240	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 9/2018 - Bridge replaced with a quad RCB in 2018. - 9/25/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-101-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	62.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	VIKING TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	UTH BRANCH GOOSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	8 SOUTH OF HATTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 30' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 28' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	615181.7 5263294.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 15 27 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 10 19 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	19 Tons
Age and Service		Appraisal	
27 Yr Built	1963 106 Yr Reconstructed	1981	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	3 Intolerable - Correct
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	4 Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	June 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	18 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.4 Ft.	Underwater	N
48 Length of Max Span	32 Ft.	Other Special	N
49 Structure Length	67.91 Ft.	218 Channel Profile	1 48 04/12/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	17.4 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	18.4 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Kirkevold
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 49-101-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,249	77	961	23	288	0	0	0	0
1180/1:Abrasion	sq.ft	288	0	0	100	288	0	0	0	0
Notes:East 8ft of deck - 6/13/2019										
111/1:Timber Open Girder	ft	1,677	68	1,144	20	333	0	0	12	200
1170/1:Split/Delamination (Timber)	ft	333	0	0	100	333	0	0	0	0
Notes:Center span girders 4, 7, 14 and 15 split - 6/13/2019										
7000/1:Damage	ft	200	0	0	0	0	0	0	100	200
Notes:Center span girder 1 tilted - 6/13/2019										
202/3:Steel Column	each	2	0	0	100	2	0	0	0	0
Notes:Corrosion on steel columns - 6/13/2019										
1000/3:Corrosion	each	2	0	0	100	2	0	0	0	0
Notes:Corrosion on steel columns - 6/13/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:Steel protective coating has completely failed - 6/13/2019										
206/3:Timber Column	each	25	60	15	40	10	0	0	0	0
1160/3:Crack (Timber)	each	25	60	15	40	10	0	0	0	0
Notes:Timber columns have cracking - 6/13/2019										
216/2:Timber Abutment	ft	36	100	36	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	75	44	33	56	42	0	0	0	0
Notes:Timber pier caps have cracking - 6/13/2019										
1160/1:Crack (Timber)	ft	75	44	33	56	42	0	0	0	0
Notes:Cracking in timber pier caps - 6/13/2019										
330/1:Metal Bridge Railing	ft	135	50	67	50	68	0	0	0	0
Notes:South guardrail has traffic damage - 6/13/2019										
7000/1:Damage	ft	68	0	0	100	68	0	0	0	0
Notes:Damage to south guardrail - 6/13/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
7000/1:Damage	each	32	100	32	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Scour & bank erosion under and around the structure. poor channel alignment. End marker SW corner. Soil on the bearing caps of both abutment. South rail has impacted damage. Posted 8 ton/axel 19 Ton gross. All timber elements have minor to moderate cracks. - 6/13/2019

Alert Code 1: Some damage to bottom of girders in all spans. - 6/13/2019

Alert Code 2: Center span girder 1 has minor tilt. - 6/13/2019

Alert Code 3: Center Span girders are split (4,7,14,15). - 6/13/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-102-01.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	35.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	GARFIELD TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RTH BRANCH GOOSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 2 NORTH OF HATTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 39' 60.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 25' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	617715.8 5280441.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 0 0 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 0 0 Tons
Dk Protect	None	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	24 Tons
Age and Service		Appraisal	
27 Yr Built	1930 106 Yr Reconstructed -1	67 Structural Condition	0 Closed
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	3 Intolerable - Correct
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 13, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	N
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevold, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 49-102-01.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	603	0	0	100	603	0	0	0	0
156/1:Timber Floor Beam	ft	23	0	0	100	23	0	0	0	0
206/3:Timber Column	each	10	0	0	70	7	10	1	20	2
216/3:Timber Abutment	ft	49	0	0	49	24	51	25	0	0
235/1:Timber Pier Cap	ft	49	0	0	100	49	0	0	0	0
332/1:Timb Bridge Railing	ft	49	0	0	100	49	0	0	0	0
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: Bridge closed: 8/29/07,11/19/08, 11/04/09, 10/25/10, 10/12/11,10/23/12, 9/30/13, 10/22/14, 10/14/15 11/6/17 10/30/18 Piling-north abut.: no. 2 is splintered & broken, no. 3 is only partially contacting cap, no. 4 is split. Piling no. 2 south abutment is not contacting cap.* no end markers. Vertical curves both directions. Heavy channel vegetation. Bridge still closed 9/13/19 Please remove from inspection list. - 9/13/2019

Alert Code 1: Timber abut. backwalls & wingwalls have varying degrees of deterioration. Erosion at end of ne wingwall. - 9/13/2019

Alert Code 2: Abut. No. 2 is pushing in at the bottom & cap is rotating. - 9/13/2019

Alert Code 3: Abut 1 pile 2 no contacting cap. Cap is rotating. Abut 2 backwall is bowed, pile 2 is broken, pile 3&4 no contact with cap,split. 3 out of 5 pile in abut 2 are being pushed out of alignment. - 9/13/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-104-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	53.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	GARFIELD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RTH BRANCH GOOSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 1 SOUTH HATTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 37' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 23' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	621011.5 5275666.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	3 Serious
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	6 Bituminous	64 Oper. Rating	HS 44 79 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 25 46 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1991 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 12, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	18 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	48.88 Ft.	218 Channel Profile	1 48 04/12/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	24.0 Ft.	213 Federal Aid Project Number	BRIDGE NO. 342 COUNTY PROJ
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 49-104-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	1,227	100	1,227	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	1,227	100	1,227	0	0	0	0	0	0
156/1:Timber Floor Beam	ft	49	96	47	0	0	4	2	0	0
1160/1:Crack (Timber)	ft	2	0	0	0	0	100	2	0	0
Notes:South floor beam cracked at west end - 6/12/2019										
206/3:Timber Column	each	18	50	9	0	0	0	0	50	9
1020/3:Connection	each	9	0	0	0	0	0	0	100	9
Notes:All piles in South abutment and piles 3, 4, 5 in North abutment have no bearing intact. - 6/12/2019										
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	75	67	50	33	25	0	0	0	0
1160/1:Crack (Timber)	ft	25	0	0	100	25	0	0	0	0
Notes:South pier cap has horizontal crack full length of cap - 6/12/2019										
332/1:Timb Bridge Railing	ft	98	96	94	4	4	0	0	0	0
7000/1:Damage	ft	4	0	0	100	4	0	0	0	0
Notes:SW corner of rail damaged - 6/12/2019										
4000/1:Settlement	each	1	100	1	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
Notes:Slope protection has minor erosion - 6/12/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Vert & hor curves both directions. Signed "curve" both directions. B&A end markers on SE corner. Moderate channel vegetation. South floor beam cracked at west end. Conduit attached to East side of bridge. - 6/12/2019

Alert Code 1: Minor cap rotation at both abutments, South pier cap has horizontal crack full length of cap - 6/12/2019

Alert Code 3: All piles in South abutment and piles 3, 4, 5 in North abutment have no bearing intact. - 6/12/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-105-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	GARFIELD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RTH BRANCH GOOSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	8 NORTH OF PORTLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 36' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 22' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	621522.9 5274668.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2004 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	January 14, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DPI-0036(006)491
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X10X50' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-105-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	100	89	89	11	11	0	0	0	0
1130/3:Cracking (RC and Other)	ft	11	0	0	100	11	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B&A markers at SE, SW, & NW corners. Vertical curve to west.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-105-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	38.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	GARFIELD TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	RTH BRANCH GOOSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH OF PORTLAND	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 35' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 22' 23.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	622337.8 5271460.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	3 Serious
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 12 21 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 7 14 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	14 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 12, 2019
32 Approach Roadway Width	15 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	21.3 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 04/12/2017
49 Structure Length	41.01 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	21.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 49-105-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	915	0	0	100	915	0	0	0	0
111/1:Timber Open Girder	ft	718	0	0	89	636	0	0	11	82
215/3:Re Conc Abutment	ft	43	0	0	79	34	0	0	21	9
332/1:Timb Bridge Railing	ft	41	0	0	100	41	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: BRIDGE CLOSED 10/29/12, 9/30/13,10/22/14,10/14/15, 11/15/16, 11/6/17, 11/1/18, 6/12/18 1/2 of rt. & lt. curb are missing. Vertical curves both directions. Old pile in channel. Minor ditch erosion NW in quadrant. - 6/12/2019

Alert Code 1: Bottom of abutment footings are exposed. East abutment has exposed piling. Section loss in floor beam. - 6/12/2019

Alert Code 2: Varying degrees of concrete deterioration in abutments and wingwalls. NE corner of abut. 2 has exposed rebar. Moderate scour under structure. North end of Abutment 2 concrete has a shear crack, causing loss of bearing for Beam #'s 16-18. - 6/12/2019

Alert Code 3: North 2 beams are split, crushed, and have failed. - 6/12/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-105-23.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	47.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	NORMAN TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 1 SOUTH CLIFFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 20' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 22' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	622161.3 5244065.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 10 18 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 6 12 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	12 Tons
Age and Service		Appraisal	
27 Yr Built	1936 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	20 30 Year of ADT 2018	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 27, 2018
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.0 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 04/17/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	19.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czczok, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 49-105-23.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	506	60	304	40	202	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	202	0	0	100	202	0	0	0	0
111/1:Timber Open Girder	ft	325	0	0	100	325	0	0	0	0
1140/1:Decay/Section Loss	ft	33	0	0	100	33	0	0	0	0
1150/1:Check/Shake	ft	292	0	0	100	292	0	0	0	0
215/3:Re Conc Abutment	ft	39	0	0	0	0	100	39	0	0
1080/3:Delamination/Spall/Patched Area	ft	39	0	0	0	0	100	39	0	0
332/1:Timb Bridge Railing	ft	49	0	0	0	0	20	10	80	39
1150/1:Check/Shake	ft	10	0	0	0	0	100	10	0	0
7000/1:Damage	ft	39	0	0	0	0	0	0	100	39
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Moderate channel debris. Sharp vertical curves both directions. No functioning railing. Washout behind ne wingwall. Broken curb on nw and se. Posted 12 tons both sides.

Alert Code 1: Splintered deck planks. NW end of curb is broken, missing on NE. East abutment has moderate concrete deterioration at water line. Minor scour under structure. Both curbs have been cut where a deck plank was previously replaced. 2 center diaphragms missing on north side. Backwall diaphragms on west broken.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-107-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	40.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	BLANCHARD TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH 4 EAST CLIFFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 20' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	626207.9 5244135.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	K Closed to all traffic
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 0 0 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 0 0 Tons
208 Dk Overburden	1 None	70 Bridge Posting	4 0.1-9.9%below
Age and Service		209 Posted in "Tons"	23 Tons
27 Yr Built	1965 106 Yr Reconstructed	1976	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	0 Closed
28 Lanes on Structure	2	68 Deck Geometry	5 Above Tolerable
29 ADT	5 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	-1.00	71 Waterway Adequacy	6 Equal Minimum
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	6 Equal Min Criteria
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	23 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	November 27, 2018
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	23.0 Ft.	Fracture Critical	N
48 Length of Max Span	28 Ft.	Underwater	N
49 Structure Length	30.84 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	218 Channel Profile	1 48 04/17/2017
	0.7 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb		207 Transporter Erector Routes and Sites	-1
	23.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	24.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 49-107-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	743	0	0	100	743	0	0	0	0
111/1:Timber Open Girder	ft	433	0	0	100	433	0	0	0	0
206/3:Timber Column	each	11	0	0	55	6	46	5	0	0
216/3:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
235/1:Timber Pier Cap	ft	52	0	0	71	37	10	5	19	10
332/1:Timb Bridge Railing	ft	62	0	0	100	62	0	0	0	0
4000/3:Settlement	each	1	100	1	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	2	50	1	50	1	0	0	0	0

Remarks: BRIDGE CLOSED 10-24-2012, 10/29/14, 11/21/16 Drive thru Asp's yard to access.

Alert Code 1: Nw wing wall is failing. no wings at sw & ne corners. moderate erosion in these areas.

Alert Code 2: Nw cor abut 1 is pushing in at bottom. Pile #6 is out of plumb 3" in 2', pile 2-5 are out of plumb 2 1/2" in 2'.
West cap is decayed between s end and pile 4. Pile 2-5 are out of plumb 2 1/2" in 2'.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-107-23.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	BLANCHARD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST OF CLIFFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 20' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	626493.4 5244288.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 41 75 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	N Not Applicable	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	2018 106 Yr Reconstructed	67 Structural Condition	9 Above Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	N Not applicable (NBI)
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	150 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	N N N N
19 Bypass, Detour Length	2 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 13, 2019
32 Approach Roadway Width	27 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	30.0 Ft.	Other Special	N
48 Length of Max Span	12 Ft.	218 Channel Profile	0 0
49 Structure Length	25.00 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	12/13/2018
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
DOUBLE 12 X 14 X 52 RCB			

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-107-23.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	104	100	104	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Structure was replaced with a 25 foot by 53 foot Precast Box Culvert in 2018 - 9/13/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-107-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	BLANCHARD TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 1 SOUTH CLIFFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 20' 17.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625052.7 5244056.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 26 47 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 18 33 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	33 Tons
Age and Service		Appraisal	
27 Yr Built	1935 106 Yr Reconstructed	1972	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	2018	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	November 27, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	24 Ft.	Other Special	N
49 Structure Length	43.96 Ft.	218 Channel Profile	1 48 04/17/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	24.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czczok, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 49-107-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,055	25	264	75	791	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	527	0	0	100	527	0	0	0	0
1180/1:Abrasion	sq.ft	264	0	0	100	264	0	0	0	0
111/1:Timber Open Girder	ft	571	95	541	4	20	2	10	0	0
1150/1:Check/Shake	ft	551	98	541	2	10	0	0	0	0
1170/1:Split/Delamination (Timber)	ft	10	0	0	0	0	100	10	0	0
7000/1:Damage	ft	10	0	0	100	10	0	0	0	0
156/1:Timber Floor Beam	ft	3	0	0	100	3	0	0	0	0
1140/1:Decay/Section Loss	ft	3	0	0	100	3	0	0	0	0
206/3:Timber Column	each	16	0	0	81	13	19	3	0	0
1150/3:Check/Shake	each	16	0	0	81	13	19	3	0	0
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
1150/3:Check/Shake	ft	49	100	49	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	79	34	27	66	52	0	0	0	0
1150/1:Check/Shake	ft	79	34	27	66	52	0	0	0	0
332/1:Timb Bridge Railing	ft	89	89	79	11	10	0	0	0	0
1150/1:Check/Shake	ft	79	100	79	0	0	0	0	0	0
7000/1:Damage	ft	10	0	0	100	10	0	0	0	0
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Bearing caps & piling had weathering cracked , Bent # 2 pile # 4 & 5 had steel shims , Scour under structure. Cable attached to Girder #1. Channel has moderate vegetation growth. Old pile in channel. No railing. Sharp horizontal curve to the north.

Alert Code 1: Moderate embankment erosion NW /SW and SE. Minor cap rotation at abutments

Alert Code 2: Beam 3, 7, 10, 11, 13, N. Span Cracked

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-108-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	LINDAAS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect RTH BRANCH GOOSE RIVER		102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH OF MAYVILLE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 32' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	626342.3 5266716.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1993 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	January 14, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	22.97 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-49(12)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 11'X8'X58' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-108-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	115	68	78	32	37	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
1130/3:Cracking (RC and Other)	ft	35	0	0	100	35	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B&A end markers on all corners. Silt accumulation of 1 ft in barrel #2. SW wing cracked w/ popouts. Minor, random cracking throughout structure. Some efflorescence is visible. Minor scour at nw wingwall. Spalls on North headwall.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-112-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	74.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	BLANCHARD TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	INTERMITTENT STREAM	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH OF BLANCHARD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 22' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 13' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	634455.2 5248744.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 20 37 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 14 26 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	26 Tons
Age and Service		Appraisal	
27 Yr Built	1932	67 Structural Condition	5 Above Min Tolerable
106 Yr Reconstructed	1974	68 Deck Geometry	5 Above Tolerable
42 Type of Service	1 Highway - On	69 Underclear. Vert & Horiz	N Not applicable (NBI)
	5 Waterway - Under	71 Waterway Adequacy	7 Above Minimum
28 Lanes on Structure	2	72 App. Rdwy. Alignment	5 Above Tolerable
29 ADT	20	36 Traffic Safety Features	0 0 0 0
30 Year of ADT	2018	113 Scour Critical	U Unknown Scour
109 Average Daily Truck Traffic	-1.00		
19 Bypass, Detour Length	4 Miles		
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 27, 2018
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	26 Ft.	218 Channel Profile	1 48 04/19/2017
49 Structure Length	46.92 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czczok, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 49-112-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,130	0	0	97	1,090	4	40	0	0
1140/1:Decay/Section Loss	sq.ft	40	0	0	0	0	100	40	0	0
1150/1:Check/Shake	sq.ft	1,000	0	0	100	1,000	0	0	0	0
1180/1:Abrasion	sq.ft	90	0	0	100	90	0	0	0	0
111/1:Timber Open Girder	ft	910	0	0	86	780	14	130	0	0
1150/1:Check/Shake	ft	910	0	0	86	780	14	130	0	0
206/3:Timber Column	each	19	0	0	100	19	0	0	0	0
1150/3:Check/Shake	each	19	0	0	100	19	0	0	0	0
216/2:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
1150/2:Check/Shake	ft	52	0	0	100	52	0	0	0	0
235/1:Timber Pier Cap	ft	75	0	0	100	75	0	0	0	0
1150/1:Check/Shake	ft	75	0	0	100	75	0	0	0	0
332/1:Timb Bridge Railing	ft	69	44	30	35	24	0	0	22	15
1150/1:Check/Shake	ft	54	56	30	44	24	0	0	0	0
7000/1:Damage	ft	15	0	0	0	0	0	0	100	15
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Posted for 11 tons per axle, 26 tons gross north only. PVC end marker on NW corner. Vertical curves both directions. Girders in Span 2 are smaller than girders in Span 1. Old pile under structure. Traffic impact to 15' of NW rail.

Alert Code 1: Channel is eroding and widening to the NE. Moderate scour at pier. Minor timber deterioration throughout structure. Channel has heavy vegetation growth. Poor channel alignment.

Alert Code 2: Pier pile 5 & 7 & N abut 2 & 5 are split. South span girders 1,6,8,10 & 11 are cracked. Both caps are crushed. North deck plank has 6"x18" section loss.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-113-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	40.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	BLOOMFIELD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	INTERMITTENT STREAM	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 1 NORTH BLANCHARD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 22' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	636035.9 5248200.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 5 10 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 3 6 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden		209 Posted in "Tons"	09 Tons
Age and Service		Appraisal	
27 Yr Built	1963 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	20 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 28, 2018
32 Approach Roadway Width	17 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 05/23/2019
49 Structure Length	41.01 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	10/01/2010
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czczok, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 49-113-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	980	100	980	0	0	0	0	0	0
111/1:Timber Open Girder	ft	574	75	430	25	144	0	0	0	0
1160/1:Crack (Timber)	ft	110	0	0	100	110	0	0	0	0
7000/1:Damage	ft	35	97	34	3	1	0	0	0	0
156/1:Timber Floor Beam	ft	24	100	24	0	0	0	0	0	0
206/3:Timber Column	each	14	0	0	100	14	0	0	0	0
1150/3:Check/Shake	each	14	0	0	100	14	0	0	0	0
216/3:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
1180/3:Abrasion	ft	52	0	0	100	52	0	0	0	0
235/1:Timber Pier Cap	ft	52	0	0	100	52	0	0	0	0
1150/1:Check/Shake	ft	52	0	0	100	52	0	0	0	0
332/1:Timb Bridge Railing	ft	82	100	82	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Yellow pvc end markers on NW & SE corners. Channel has vegetation growth. Some diaphragms are loose.
Girder # 9 & 11 have abrasion damage.

Alert Code 1: South bracing & most diaphragms are missing. North bridging has many of the nails pulled out. Shear cracked 3/4 length on girder # 7 ; Girder # 8 & # 9 had 1/3 length shear cracked.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-114-19.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	BLOOMFIELD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	INTERMITTENT STREAM	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST OF HILLSBORO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 23' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	636806.3 5250815.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2017 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	November 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	18.0 Ft.	Underwater	N
48 Length of Max Span	9 Ft.	Other Special	N
49 Structure Length	20.50 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	12/06/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Czeczok, Kelsch
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 71" X 107" X 35' CMP		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-114-19.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/1:Steel Culvert	ft	70	100	70	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: Grout between the pipes is cracked. - 11/6/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-115-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	47.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	BLOOMFIELD TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NORTH BRANCH ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 2 NORTH BLANCHARD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 22' 55.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	638084.3 5249232.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 11 20 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 6 11 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	100 None	209 Posted in "Tons"	11 Tons
Age and Service		Appraisal	
27 Yr Built	1964 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2018	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 28, 2018
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 04/19/2017
49 Structure Length	40.03 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czczok, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 49-115-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	958	0	0	100	958	0	0	0	0
1180/1:Abrasion	sq.ft	958	0	0	100	958	0	0	0	0
111/1:Timber Open Girder	ft	522	0	0	100	522	0	0	0	0
1150/1:Check/Shake	ft	442	0	0	100	442	0	0	0	0
1170/1:Split/Delamination (Timber)	ft	80	0	0	100	80	0	0	0	0
156/1:Timber Floor Beam	ft	24	100	24	0	0	0	0	0	0
206/3:Timber Column	each	12	0	0	100	12	0	0	0	0
1150/3:Check/Shake	each	12	0	0	100	12	0	0	0	0
216/3:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
1180/3:Abrasion	ft	52	0	0	100	52	0	0	0	0
235/1:Timber Pier Cap	ft	52	0	0	100	52	0	0	0	0
1150/1:Check/Shake	ft	52	0	0	100	52	0	0	0	0
330/1:Metal Bridge Railing	ft	79	52	41	48	38	0	0	0	0
7000/1:Damage	ft	38	0	0	100	38	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: No curb. Minor damage to north railing. Heavy channel vegetation. Old piling in channel. Vertical curve-west. Conduit attached to north edge of deck. NE rail post split. Posted both directions at 11 tons.

Alert Code 1: Minor timber deterioration throughout structure. Both outside girders have shrinkage cracks. Pile 2 in west abutment has a small crack. Scour under bridge. West cap is cracked on the N end.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-115-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	BLOOMFIELD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NORTH BRANCH ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 3 EAST BLANCHARD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 22' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 09' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	639284.1 5247652.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 29 53 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 12 22 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2013 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 28, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	80 Ft.	Other Special	N
49 Structure Length	80.00 Ft.	218 Channel Profile	1 48 04/19/2017
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/11/2013
	28.0 Ft.	213 Federal Aid Project Number	BRO-0049(016)
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Czczok, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-115-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,440	100	2,440	0	0	0	0	0	0
520/1:Conc Re Prot Sys	sq.ft	2,440	100	2,440	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	308	100	308	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	102	100	102	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	160	100	160	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-116-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	48.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	BUXTON TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	INTERMITTENT STREAM	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF REYNOLDS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 40' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 07' 60.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	640126.7 5281527.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 8 15 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 5 10 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 13, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 04/11/2017
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nguyen, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-116-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	581	100	581	0	0	0	0	0	0
Notes:New deck in 2019. - 11/13/2019										
111/1:Timber Open Girder	ft	864	100	864	0	0	0	0	0	0
Notes:New added to the existing in 2019 (see photos) . - 11/13/2019										
1140/1:Decay/Section Loss	ft	192	100	192	0	0	0	0	0	0
Notes:New added to existing in 2019. - 11/13/2019										
206/3:Timber Column	each	12	58	7	42	5	0	0	0	0
Notes:Weathering / splits /cracked / & hollow columns . - 11/13/2019										
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
7000/3:Damage	each	3	0	0	100	3	0	0	0	0
Notes:3 Column had cracked & hollow. - 11/13/2019										
216/3:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
Notes:Replaced back wall timbers in 2019. - 11/13/2019										
6000/3:Scour	ft	28	100	28	0	0	0	0	0	0
Notes:Replaced back wall timber in 2019. - 11/13/2019										
235/2:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
Notes:New cap (south) in 2019. - 11/13/2019										
1140/2:Decay/Section Loss	ft	0	0	0	0	0	0	0	0	0
Notes:Replaced in 2019. - 11/13/2019										
1150/2:Check/Shake	ft	56	100	56	0	0	0	0	0	0
Notes:New cap & deck in 2019. - 11/13/2019										
332/1:Timb Bridge Railing	ft	0	0	0	0	0	0	0	0	0
Notes:No railing . - 11/13/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B/A end marker at NE corner. PVC markers to all corners . STRUCTURE LOCATED AT INTERSECTION.
 POSTED 4 TONS PER AXLE, 10 TONS GROSS. New deck /back wall / south bearing cap and added on girders
 (see the photo) but no railing installed in 2019. - 11/13/2019

Alert Code 1: Variety degree of weathering crack to timber elements (columns & abutment) . - 11/13/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-116-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	59.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	BOHNSACK TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST OF GRANDIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 14' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 08' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	641216.0 5233388.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 13 23 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 8 16 Tons
208 Dk Overburden	100 None	70 Bridge Posting	1 30.0-39.9%below
Age and Service		209 Posted in "Tons"	16 Tons
27 Yr Built	1930	Appraisal	
106 Yr Reconstructed	1977	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	20	72 App. Rdwy. Alignment	7 Above Min Criteria
30 Year of ADT	2018	36 Traffic Safety Features	0 0 0 0
109 Average Daily Truck Traffic	-1.00	113 Scour Critical	U Unknown Scour
19 Bypass, Detour Length	2 Miles		
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 28, 2018
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	32 Ft.	218 Channel Profile	1 48 04/17/2017
49 Structure Length	35.10 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 49-116-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	840	0	0	100	840	0	0	0	0
1150/1:Check/Shake	sq.ft	840	0	0	100	840	0	0	0	0
111/1:Timber Open Girder	ft	735	50	367	50	368	0	0	0	0
1150/1:Check/Shake	ft	368	0	0	100	368	0	0	0	0
7000/1:Damage	ft	367	100	367	0	0	0	0	0	0
206/3:Timber Column	each	7	0	0	100	7	0	0	0	0
7000/3:Damage	each	7	0	0	100	7	0	0	0	0
215/3:Re Conc Abutment	ft	23	0	0	100	23	0	0	0	0
1130/3:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
6000/3:Scour	ft	19	0	0	100	19	0	0	0	0
216/3:Timber Abutment	ft	26	0	0	100	26	0	0	0	0
7000/3:Damage	ft	26	0	0	100	26	0	0	0	0
235/1:Timber Pier Cap	ft	49	0	0	100	49	0	0	0	0
1020/1:Connection	ft	15	0	0	100	15	0	0	0	0
1150/1:Check/Shake	ft	24	0	0	100	24	0	0	0	0
7000/1:Damage	ft	10	0	0	100	10	0	0	0	0
332/1:Timb Bridge Railing	ft	69	100	69	0	0	0	0	0	0
1150/1:Check/Shake	ft	20	100	20	0	0	0	0	0	0
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
7000/3:Damage	each	2	0	0	100	2	0	0	0	0

Remarks: Traill Bridge # 262 Timber cap on east (concrete) abutment. Extended wingwall system on East. Posted for 7 tons per axle 16 tons gross on east. Old Pile in channel. Moderate vegetation growth in channel. No endmarkers. Fire damage to west abutment and girders. Minor scour under structure. South girder has weathering crack.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-118-28.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Major Collector
04 City	BOHNSACK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04928 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 2 NORTH OF GRANDIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	14.597	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 16' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 05' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	643837.0 5236655.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1978 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	110 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 28, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	25 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Kirkevold
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
SINGLE, 25-6X16-10X104' SPPA		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-118-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	105	32	34	34	36	33	35	0	0
1000/3:Corrosion	ft	70	0	0	49	35	49	35	0	0
7000/3:Damage	ft	1	0	0	100	1	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	34	34	33	33	0	0	33	33
3440/3:Eff (Stl Protect Coat)	sq.ft	66	0	0	50	33	0	0	50	33
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8398/2:Slope Protection	each	1	0	0	100	1	0	0	0	0

Remarks: MODERATE EMBANKMENT EROSION NE QUADRANT. VERTICAL CURVES BOTH DIRECTIONS. SIGNED "NO PASSING" AND "NO PASSING ZONE" BOTH DIRECTIONS.

Alert Code 1: Moderate rust at pipe invert. Minor erosion at sw corner of pipe. Missing 10 to 15 bolts west wall north end of barrel at the top of wing level.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-118-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	87.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	BOHNSACK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST OF GRANDIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 14' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 05' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	643941.4 5233449.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 35 64 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	0 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 0 1 1
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	September 16, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	58 Ft.	Other Special	N
49 Structure Length	101.05 Ft.	218 Channel Profile	1 48 04/17/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kirkevold, Finton
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 49-118-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
15/1:Pre Concrete Top Flange	sq.ft	3,021	100	3,021	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	807	100	807	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	97	29	3	1	0	0	0	0
1130/3:Cracking (RC and Other)	ft	1	0	0	100	1	0	0	0	0
Notes:Horizontal crack in pier - 9/16/2019										
215/2:Re Conc Abutment	ft	59	37	22	58	34	5	3	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Spalling on bottom of East abutment - 9/16/2019										
1130/2:Cracking (RC and Other)	ft	8	0	0	63	5	38	3	0	0
Notes:Cracking in both abutments - 9/16/2019										
6000/2:Scour	ft	27	0	0	100	27	0	0	0	0
Notes:East abutment has moderate to major undermining - 9/16/2019										
301/1:Pourable Joint Seal	ft	30	0	0	0	0	0	0	100	30
2330/1:Seal Damage	ft	30	0	0	0	0	0	0	100	30
Notes:Joint seal has failed - 9/16/2019										
330/1:Metal Bridge Railing	ft	203	100	203	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	203	99	200	2	3	0	0	0	0
1130/1:Cracking (RC and Other)	ft	3	0	0	100	3	0	0	0	0
Notes:Cracks counted in concrete bridge rail - 9/16/2019										
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor channel vegetation. Vertical curves both directions. Horizontal crack in pier and spalls near beam seat. There is a dip in the rail and deck due to a high degree of positive camber in T-beam sections. - 9/16/2019

Alert Code 1: Moderate vertical and horizontal cracking throughout the east abutment. - 9/16/2019

Alert Code 2: Bottom of east abutment and piling exposed. Moderate to major erosion behind East abutment. - 9/16/2019

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SEC 409

Structure Number: 49-119-07.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	ERVIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BUFFALO COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 2 SOUTH BUXTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	22.995	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 34' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 04' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	645147.2 5270975.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	80 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 28, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.2 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	27.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/07/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Finton, Kirkevold
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 12 X 12 X 52' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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Structure Number: 49-119-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	104	100	104	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Double B&A end markers on approach corners. Minor cracking at parapets.

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SEC 409

Structure Number: 49-119-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	BOHNSACK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 1 NORTH GRANDIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 15' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 04' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	646011.1 5235486.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 29 53 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2017 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	November 28, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	90 Ft.	Other Special	N
49 Structure Length	90.00 Ft.	218 Channel Profile	1 48 01/01/2000
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	02/16/2018
	28.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Structure Number: 49-119-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	2,700	100	2,700	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	360	100	360	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
313/1:Fixed Bearing	each	8	100	8	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	180	100	180	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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SEC 409

Structure Number: 49-120-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	53.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	HILLSBORO TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF KELSO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 19' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 02' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	647421.2 5243351.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 24 44 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 10 19 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	19 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	40 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 24, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 10/24/2019
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.7 Ft.	Other Special	N
48 Length of Max Span	82 Ft.	218 Channel Profile	1 48 04/17/2017
49 Structure Length	83.99 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	19.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	21.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevold, Finton, Czezok, Kelsch
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Structure Number: 49-120-24.0

Structure Number: 49-120-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,765	91	1,605	9	160	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	160	0	0	100	160	0	0	0	0
Notes:Random cracking throughout deck - 10/24/2019										
113/1:Steel Stringer	ft	505	80	405	20	100	0	0	0	0
1000/1:Corrosion	ft	100	0	0	100	100	0	0	0	0
Notes:Minor corrosion on steel stringers - 10/24/2019										
515/1:Steel Protective Coating	sq.ft	100	40	40	30	30	30	30	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	40	40	30	30	30	30	0	0
Notes:Coating has varying degrees of effectiveness. - 10/24/2019										
120/1:Steel Truss	ft	167	0	0	100	167	0	0	0	0
1000/1:Corrosion	ft	167	0	0	100	167	0	0	0	0
Notes:Minor corrosion on steel truss - 10/24/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Steel protective coating has limited effectiveness - 10/24/2019										
152/1:Steel Floor Beam	ft	98	0	0	100	98	0	0	0	0
1000/1:Corrosion	ft	98	0	0	100	98	0	0	0	0
Notes:Minor corrosion in steel floor beams - 10/24/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Steel protective coating has limited effectiveness - 10/24/2019										
162/2:Stl Gus Plate	each	44	0	0	100	44	0	0	0	0
1000/2:Corrosion	each	44	0	0	100	44	0	0	0	0
Notes:Minor corrosion on steel gusset plate - 10/24/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Steel protective coating has limited effectiveness - 10/24/2019										
215/3:Re Conc Abutment	ft	49	57	28	31	15	12	6	0	0
1080/3:Delamination/Spall/Patched Area	ft	6	0	0	0	0	100	6	0	0
Notes:Spalls beneath NE & NW bearings with exposed rebar which reduce bearing area by approximately 50%. - 10/24/2019										
1130/3:Cracking (RC and Other)	ft	15	0	0	100	15	0	0	0	0
Notes:Cracks counted in concrete abutment - 10/24/2019										
313/1:Fixed Bearing	each	4	0	0	50	2	50	2	0	0
1000/1:Corrosion	each	4	0	0	50	2	50	2	0	0
Notes:Minor corrosion on fixed bearings - 10/24/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Steel protective coating has limited effectiveness - 10/24/2019										
330/1:Metal Bridge Railing	ft	164	0	0	88	144	0	0	12	20

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SEC 409

Structure Number: 49-120-24.0

1000/1:Corrosion	ft	144	0	0	100	144	0	0	0	0
Notes:Minor corrosion on metal bridge railing - 10/24/2019										
7000/1:Damage	ft	20	0	0	0	0	0	0	100	20
Notes:Metal bridge rail is missing the NE, SW and SE end rails - 10/24/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Steel protective coating has limited effectiveness - 10/24/2019										
331/1:Re Conc Bridge Railing	ft	167	0	0	100	167	0	0	0	0
1130/1:Cracking (RC and Other)	ft	167	0	0	100	167	0	0	0	0
Notes:cracks counted in concrete bridge railing - 10/24/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: B&A markers on 4 corners. NW, NE & SW corner of railing has been removed. Horizontal curves both directions. East deck drains plugged with gravel and dirt. Posted 8 tons per axle, 19 tons gross. Fracture Critical done in Nov 2018. 9/16/18: High water, need boat. 10/24/18: Able to inspect beneath. - 10/24/2019

Alert Code 1: Minor to moderate rust - entire structure. Bullet hole in upper gusset plate at NE corner of bridge. Uprights between upper and lower chords on east side are bent. - 10/24/2019

Alert Code 2: Structure appears to be pushing north - anchor bolts are bent. - 10/24/2019

Alert Code 3: Concrete is spalled with exposed & corroded rebar at bearing area. NE & NW bearing seat section loss 50 % intact. - 10/24/2019

Fracture Critical: Fracture critical was completed with a hammer, extendable mirror and a ladder. Fracture critical was done 11-28-18 - 10/24/2019

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SEC 409

Structure Number: 49-122-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	45.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	STAVANGER TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BUFFALO COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 1 SOUTH BUXTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 35' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 00' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	649476.3 5272099.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 8 14 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 4 9 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1920 106 Yr Reconstructed	1976	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	2019	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 N N
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	November 06, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	18 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.3 Ft.	Underwater	N
48 Length of Max Span	39 Ft.	Other Special	N
49 Structure Length	41.01 Ft.	218 Channel Profile	1 48 05/14/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	23.6 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	24.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch, Czczok
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 49-122-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	980	100	980	0	0	0	0	0	0
1180/1:Abrasion	sq.ft	980	100	980	0	0	0	0	0	0
111/1:Timber Open Girder	ft	656	94	617	0	0	6	39	0	0
1150/1:Check/Shake	ft	39	0	0	0	0	100	39	0	0
Notes:Diagonal shakes located in the south face of the south girder which do not extend thru the girder section. - 11/6/2019										
206/3:Timber Column	each	12	83	10	17	2	0	0	0	0
1170/3:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes:Top of south pile in both abutments are split - 11/6/2019										
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	52	94	49	6	3	0	0	0	0
1170/2:Split/Delamination (Timber)	ft	3	0	0	100	3	0	0	0	0
Notes:Both ends of east and north end of west cap are split. - 11/6/2019										
330/1:Metal Bridge Railing	ft	82	90	74	10	8	0	0	0	0
1020/1:Connection	ft	8	0	0	100	8	0	0	0	0
Notes:Tops of all wood rail posts are decayed - 11/6/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Incomplete Element Inspection 09/16/2019 - 11/6/2019										

Remarks: Rough approaches. Old pile in channel. Posted 4 tons per axle, 10 tons gross. PVC marker on SW and NE.
Heavy channel scour under structure. Heavy channel veg. 11/6/2019: CHANGE INSPECTION FREQUENCY TO
24 MONTHS - DIAGONAL SHAKES IN SOUTH GIRDER ARE NOT A CODE 3. - 11/6/2019

Alert Code 1: SE & SW pile are split. East & NW end of caps are cracked. Pile #1 east abutment is split. Timber has minor weather cracking. - 11/6/2019

Alert Code 2: 10/14, 10/15, 11/19: South girder has 5 diagonal shakes (not through the entire section) from top to bottom throughout the entire span. - 11/6/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-122-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	40.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	KELSO TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NORTH BRANCH ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 6 SOUTH HILLSBORO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 19' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 00' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	650552.8 5242475.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 11 19 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 7 13 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	13 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 18, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	22.0 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 05/28/2015
49 Structure Length	41.01 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	22.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevold, Finton, Kelsch, Czczok
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 49-122-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	904	0	0	100	904	0	0	0	0
1180/1:Abrasion	sq.ft	904	0	0	100	904	0	0	0	0
Notes:Minor abrasion throughout deck - 12/18/2019										
111/1:Timber Open Girder	ft	532	47	250	50	267	3	15	0	0
1150/1:Check/Shake	ft	117	0	0	100	117	0	0	0	0
Notes:Weather-checking at various locations. - 12/18/2019										
1170/1:Split/Delamination (Timber)	ft	15	0	0	0	0	100	15	0	0
Notes:Girder 5 has a through-split 2" from the bottom in the south 15'. - 12/18/2019										
1180/1:Abrasion	ft	150	0	0	100	150	0	0	0	0
Notes:Abrasion at various locations. - 12/18/2019										
156/1:Timber Floor Beam	ft	64	100	64	0	0	0	0	0	0
1150/1:Check/Shake	ft	64	100	64	0	0	0	0	0	0
Notes:Minor weather checking throughout. - 12/18/2019										
215/3:Re Conc Abutment	ft	43	0	0	54	23	47	20	0	0
1130/3:Cracking (RC and Other)	ft	2	0	0	0	0	100	2	0	0
Notes:Wide cracks at NE & SW corners. - 12/18/2019										
1190/3:Abrasion(PSC/RC)	ft	33	0	0	70	23	30	10	0	0
6000/3:Scour	ft	8	0	0	0	0	100	8	0	0
Notes:Probing at abutment corners revealed a 3-4' scour area at NW corner. - 12/18/2019										
235/1:Timber Pier Cap	ft	43	0	0	100	43	0	0	0	0
1150/1:Check/Shake	ft	43	0	0	100	43	0	0	0	0
Notes:Weather checking of abutment cap planks - 12/18/2019										
8398/3:Slope Protection	each	1	0	0	0	0	0	0	100	1
Notes:11/25/19: Slope protection, if present, is underwater. - 12/18/2019										
2210/3:Movement	each	1	0	0	0	0	0	0	100	1
Notes:11/25/19: Slope protection, if present, is underwater. - 12/18/2019										
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
1130/3:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
Notes:Cracking at NE and SW wingwalls. - 12/18/2019										

Remarks: Short vertical curve-south. Accumulation of dirt & gravel on caps. Concrete back wall at deck is spalling out leaving a gap at both ends. Posted for 13 ton. No evidence of slope protection. PVC markers on SE corner. Moderate scaling at abutments. Deck planks are misaligned and pushed to the west, mainly in the center. Incomplete Inspection 9/16/19 unable to inspect underside due to high water. 11/25/2019: Unable to verify condition of girders due to thin ice. 12/18/19:Completed inspection. - 12/18/2019

Alert Code 1: Minor erosion at both abuts. Moderate abut wear throughout, & wide cracks at NE and SW corners. SW & NE wingwall are cracked. Girders are weathered: shakes in south 1/2 of Girders 4, 7, 10, and entire length of east fascia girder. Through-split of Girder 5 2" from the bottom in the south 15'. - 12/18/2019

Alert Code 2: Probing at abutment corners revealed a 3-4' scour area at NW corner. - 12/18/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-123-30.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	78.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Major Collector
04 City	KELSO TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04919 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	NORTH OF GRANDIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.500	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 14' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 00' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	650977.5 5234439.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	6 Bituminous	64 Oper. Rating	HS 22 41 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 13 25 Tons
208 Dk Overburden	310 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	18 Tons
27 Yr Built	1937 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	310 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 1 1 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	January 15, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	63 Ft.	Other Special	N
49 Structure Length	64.96 Ft.	218 Channel Profile	1 48 05/21/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/02/2017
	30.8 Ft.	213 Federal Aid Project Number	F-6-081()100
52 Deck Width	32.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Nguyen
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 49-123-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,142	70	1,499	30	643	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	642	0	0	100	642	0	0	0	0
510/1:Wearing Surfaces	sq.ft	2,142	83	1,778	17	364	0	0	0	0
3220/1:Crack (Wearing Surface)	sq.ft	364	0	0	100	364	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	259	0	0	100	259	0	0	0	0
1000/1:Corrosion	ft	259	0	0	100	259	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
215/3:Re Conc Abutment	ft	69	0	0	100	69	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
1130/3:Cracking (RC and Other)	ft	66	0	0	100	66	0	0	0	0
311/1:Moveable Bearing	each	8	0	0	50	4	50	4	0	0
1000/1:Corrosion	each	4	0	0	100	4	0	0	0	0
2220/1:Alignment	each	4	0	0	0	0	100	4	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
330/1:Metal Bridge Railing	ft	131	100	131	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	131	0	0	100	131	0	0	0	0
1190/1:Abrasion(PSC/RC)	ft	131	0	0	100	131	0	0	0	0
4000/1:Settlement	each	1	100	1	0	0	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
1080/3:Delamination/Spall/Patched Area	each	2	0	0	100	2	0	0	0	0

Remarks: Posted for 8 tons per axle 18 tons gross. Drain pipes on west side of structure are bent. End markers on all four corners. Two inch conduit attached to west curb. Vertical curve to the north. Vertical and horizontal curve to the south. Bridge has w-beam guardrail. PVC markers on approach corners.

Alert Code 1: Minor deck cracking with minor to moderate soffit efflorescence is visible. 10 out of 12 angle iron diaphragms are bent.

Alert Code 2: NW rocker is tilted against north abutment. Beams are pushed against abut. Abut has large horizontal cracks. The south deck is pushing out past the abut face approx. 1". Both abuts have moderate spalling at waterline with holes completely thru the concrete. Erosion behind SE wingwall with undermining on the south bridge end. North backwall is cracked just above the top of the abut. Deck has longitudinal, flexural cracks with effl & rust staining.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-124-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	61.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	ELDORADO TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GOOSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 4 EAST HILLSBORO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 25' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 57' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	653538.4 5255053.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	4 Protection Undermined
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 29 52 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 26 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	26 Tons
Age and Service		Appraisal	
27 Yr Built	1970 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	45 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 14, 2019
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.2 Ft.	Other Special	N
48 Length of Max Span	68 Ft.	218 Channel Profile	1 48 05/28/2019
49 Structure Length	182.09 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 49-124-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
15/1:Pre Concrete Top Flange	sq.ft	5,444	0	0	100	5,444	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	5,444	0	0	100	5,444	0	0	0	0
Notes:Deck has gravel overburden and exposed areas of deck shows minor wear - 6/14/2019										
104/1:Pre Clsd Box Girder	ft	1,821	98	1,790	0	6	0	0	1	25
1080/1:Delamination/Spall/Patched Area	ft	6	0	0	100	6	0	0	0	0
Notes:Underside of box beam #2 center span is cracked with exposed rebar. - 6/14/2019										
1110/1:Cracking (PSC)	ft	25	0	0	0	0	0	0	100	25
Notes:Underside of box beam #2 center span is cracked with exposed rebar - 6/14/2019										
205/3:Re Conc Column	each	6	0	0	100	6	0	0	0	0
1130/3:Cracking (RC and Other)	each	6	0	0	100	6	0	0	0	0
Notes:Minor random cracking in lower 1/3 of columns. - 6/14/2019										
215/2:Re Conc Abutment	ft	59	80	47	20	12	0	0	0	0
1130/2:Cracking (RC and Other)	ft	12	0	0	100	12	0	0	0	0
Notes:Typical Cracking in both abutments. - 6/14/2019										
233/1:Pre Conc Pier Cap	ft	121	87	105	13	16	0	0	0	0
1110/1:Cracking (PSC)	ft	16	0	0	100	16	0	0	0	0
Notes:Both ends of both pier caps have vertical cracks - 6/14/2019										
301/1:Pourable Joint Seal	ft	59	0	0	0	0	0	0	100	59
2330/1:Seal Damage	ft	59	0	0	0	0	0	0	100	59
Notes:Joint seal has failed at all joints. - 6/14/2019										
330/1:Metal Bridge Railing	ft	364	0	0	97	354	3	10	0	0
1020/1:Connection	ft	354	0	0	100	354	0	0	0	0
Notes:Bridge rail connections are installed against the traffic. - 6/14/2019										
7000/1:Damage	ft	10	0	0	0	0	100	10	0	0
Notes:East and west rail has traffic impact damage. - 6/14/2019										
515/1:Steel Protective Coating	sq.ft	10	0	0	0	0	100	10	0	0
Notes:East and west rail has traffic impact that caused damage to the protective coating - 6/14/2019										
3440/1:Eff (Stl Protect Coat)	sq.ft	10	0	0	100	10	0	0	0	0
Notes:Around the damage on the west guardrail - 6/14/2019										
331/1:Re Conc Bridge Railing	ft	364	87	315	13	48	0	1	0	0
1130/1:Cracking (RC and Other)	ft	48	0	0	100	48	0	0	0	0
Notes:Minor cracking throughout concrete bridge railing - 6/14/2019										
7000/1:Damage	ft	1	0	0	0	0	100	1	0	0
Notes:Damaged curb over pier 3 west side. - 6/14/2019										
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Scour around pier 2 and pier 3. - 6/14/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: PVC end markers on SE and NW corners. Posted for 26 tons. Seepage stain over pier cap. East rail and West rail has traffic impact damage. - 6/14/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-124-17.0

Alert Code 1: Minor, random cracking in lower 1/3 of columns. Cracks in curb over Pier 3. Scour around columns. Embankment sliding into channel. Erosion and instability in both banks. Girder joints are leaking. Timber spacer blocks between steel rail posts & w-beam rail are loose & have varying degrees of deterioration, some missing. Spalling at beam ends of driving surface. Both ends of pier caps have vertical cracks. - 6/14/2019

Alert Code 3: Underside of Box Beam #2 center span is cracked and has exposed rebar. - 6/14/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-125-28.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	61.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Major Collector
04 City	KELSO TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04928 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 2 NORTH GRANDIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	21.396	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 16' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 57' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	654703.3 5236972.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 18 33 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 11 20 Tons
Dk Protect	None	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	34 Tons
Age and Service		Appraisal	
27 Yr Built	1937 106 Yr Reconstructed	1961	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	130 30 Year of ADT	2019	7 Above Minimum
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 10, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	73 Ft.	Other Special	N
49 Structure Length	149.93 Ft.	218 Channel Profile	1 48 04/17/2017
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/02/2017
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Finton, Kirkevold
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 49-125-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,349	50	2,174	50	2,175	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	75	0	0	100	75	0	0	0	0
Notes:Minor, random deck cracking. - 6/10/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	2,100	0	0	100	2,100	0	0	0	0
Notes:The deck has minor abrasion throughout - 6/10/2019										
107/1:Steel Opn Girder/Beam	ft	600	0	0	100	600	0	0	0	0
1000/1:Corrosion	ft	550	0	0	100	550	0	0	0	0
Notes:Girders have corrosion and rust - 6/10/2019										
1900/1:Distortion	ft	50	0	0	100	50	0	0	0	0
Notes:South girder is out of plumb. - 6/10/2019										
210/3:Re Conc Pier Wall	ft	30	83	25	17	5	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
Notes:Minor spalling on pier wall - 6/10/2019										
215/2:Re Conc Abutment	ft	59	83	49	17	10	0	0	0	0
1130/2:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:Cracking in concrete abutment - 6/10/2019										
234/1:Re Conc Pier Cap	ft	30	83	25	17	5	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
Notes:Minor to moderate cracks & spalls in pier cap have been repaired on east side, 1 spall on west and 4 ft of spall on the east side. - 6/10/2019										
301/1:Pourable Joint Seal	ft	30	0	0	0	0	0	0	100	30
2330/1:Seal Damage	ft	30	0	0	0	0	0	0	100	30
Notes:No joint seal remaining - 6/10/2019										
311/2:Moveable Bearing	each	16	100	16	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	299	84	252	6	19	5	14	5	14
1080/1:Delamination/Spall/Patched Area	ft	33	0	0	58	19	42	14	0	0
Notes:North railing : # 11 & # 12 are spalled. South railing : Rail post # 1 have spalled and rebar exposed , Curb rail has 8 ft rebar exposed. - 6/10/2019										
1090/1:Exposed Rebar	ft	14	0	0	0	0	0	0	100	14
Notes:South railing : Rail post # 1 have spalled and rebar exposed , Curb rail has 8 ft rebar exposed. - 6/10/2019										
8398/2:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Signed ""trucks must not meet on bridge"" both directions. Yellow pvc markers on NE & SW corners. North railing : rail post # 1 & # 2 have cracked ; # 11 & # 12 are spalled. South railing : Rail post # 1 have spalled and rebar exposed , Curb rail has 8 ft rebar exposed. Minor, random deck cracking. Moderate degrees of girder rust. Minor to moderate cracks & spalls in pier cap have been repaired on east side, 1 spall on west and 4 ft of spall on the east side. - 6/10/2019

Alert Code 2: South girder has debris impact that caused the girder to go out of plumb. South girder has minor to moderate rust in the web, top and bottom flange over pier. SW corner joint seat is failed. - 6/10/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-126-26.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	39.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	ELM RIVER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NORTH BRANCH ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 8 SOUTH HILLSBORO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 17' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 55' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	656371.3 5240195.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 6 11 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 4 8 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	08 Tons
Age and Service		Appraisal	
27 Yr Built	1966 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 16, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 05/21/2019
49 Structure Length	86.94 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Kirkevoid, Finton
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 49-126-26.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	2,088	0	0	100	2,088	0	0	0	0
1140/1:Decay/Section Loss	sq.ft	1,044	0	0	100	1,044	0	0	0	0
Notes:Minor decay on deck planks - 9/16/2019										
1180/1:Abrasion	sq.ft	1,044	0	0	100	1,044	0	0	0	0
Notes:Minor abrasion on timber deck - 9/16/2019										
111/1:Timber Open Girder	ft	1,217	0	0	90	1,093	1	10	9	114
1150/1:Check/Shake	ft	1,093	0	0	100	1,093	0	0	0	0
Notes:Minor checking throughout timber girders - 9/16/2019										
1170/1:Split/Delamination (Timber)	ft	124	0	0	0	0	8	10	92	114
Notes:Girder 1 & 6 center span, and Girder 5 east span are cracked horizontally. Girder 2 center span is cracked at east third. - 9/16/2019										
206/3:Timber Column	each	24	0	0	92	22	8	2	0	0
1170/3:Split/Delamination (Timber)	each	24	0	0	92	22	8	2	0	0
Notes:All timber columns are cracked - 9/16/2019										
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
1150/3:Check/Shake	ft	49	100	49	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	95	0	0	100	95	0	0	0	0
1150/1:Check/Shake	ft	95	0	0	100	95	0	0	0	0
Notes:Timber pier caps have minor checks and shakes - 9/16/2019										
330/1:Metal Bridge Railing	ft	174	77	134	23	40	0	0	0	0
1900/1:Distortion	ft	40	0	0	100	40	0	0	0	0
Notes:Minor metal bridge rail distortion. - 9/16/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Steel protective coating is starting to show signs of loss of effectiveness - 9/16/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Old pile and abutment under structure. Horiz. curves both directions. Posted for 3 ton per axle, 8 ton gross.
10/1/2013 - Talked with Corwin of Traill County about problems with girder blocks. PVC markers SW & NE. -
9/16/2019

Alert Code 1: Deck has abrasion and decay, some planks have been replaced. - 9/16/2019

Alert Code 2: Girder 1 & 6 center span, and Girder 5 east span are cracked horizontally. Corners are cracked & broken on the end of the girders of the center span - east 1, 4, 7, 8, 9, 10, 12 & 13; west 1, 4, 7, 9, 10 & 13. - 9/16/2019

Alert Code 3: Moderate girder bearing blocks rotting, the majority of the blocks on both piers are cracked. No. 11 on the west pier is missing. Girder 2 center span is cracked at east third. - 9/16/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-126-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Local
04 City	ELM RIVER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	NORTH BRANCH ELM RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 8 SOUTH HILLSBORO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 17' 40.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 55' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	657082.5 5239993.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2018	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 21, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.7 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-49(5)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Kelsch, Nguyen
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10X9X50' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 49-126-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	151	66	100	34	51	0	0	0	0
1090/3:Exposed Rebar	ft	4	0	0	100	4	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	17	0	0	100	17	0	0	0	0
1130/3:Cracking (RC and Other)	ft	30	0	0	100	30	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
1080/3:Delamination/Spall/Patched Area	each	2	0	0	100	2	0	0	0	0

Remarks: Double B&A end markers on approach corners. Minor, random cracking throughout structure. Rust stains on roof - no cracking evident.

Alert Code 1: Chairs are corroding thru the roof of all barrels, some areas are spalling. Efflorescence on outside walls. SW wing wall is breaking off. Headwalls have significant hairline cracking extending to the roof with efflor.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-128-15.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	88.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Fargo District	22 Owner	County Hwy Agency
03 County	Traill	26 Functional	Rural, Major Collector
04 City	CALEDONIA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	04916 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GOOSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTHEAST OF CALEDONIA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	14.697	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 27' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	96d 52' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	659921.4 5258367.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Girder - FB		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 30 54 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 13 24 Tons
Dk Protect	1 Epoxy Coated Reinforci	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	2018 106 Yr Reconstructed	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	160 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	1 1 1 1
19 Bypass, Detour Length	2 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 16, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.0 Ft.	Other Special	N
48 Length of Max Span	98 Ft.	218 Channel Profile	1 48 01/01/2000
49 Structure Length	294.00 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	1.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb		213 Federal Aid Project Number	BRC-CNOC-4916(055)
	28.0 Ft.	214 Delayed Inspection	Not Applicable
52 Deck Width	30.0 Ft.	216 Inspector	Kirkevoid, Finton
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	Navigation Data	
54 Min Vert Underclearance	0 Ft. 0 In.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
55 Min Lateral UnderClear. - Rt	99.9 Ft.	40 Navigation Horizontal Clearance	0 Ft.
	N Feature not hwy or RR	111 Pier or Abutment Protection	Unknown (NBI)
56 Min Lateral UnderClear. - Lt	0.0 Ft.	116 Minimum Navigation Vertical Clearance	Ft.
210 Culvert / 211 Description			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 49-128-15.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	8,820	100	8,820	0	0	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	100	100	100	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	1,470	100	1,470	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	56	100	56	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	60	100	60	0	0	0	0	0	0
313/1:Fixed Bearing	each	20	100	20	0	0	0	0	0	0
321/1:Re Conc Approach Slab	sq.ft	637	100	637	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	588	100	588	0	0	0	0	0	0
7000/1:Damage	ft	350	100	350	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/2018: New structure. Structure is on a horizontal curve. Vertical curves on both sides of structure. Bridge rail and bridge rail posts have damage due to traffic impact. - 9/16/2019

Structure Number: 50-111-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	ADAMS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF ADAMS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 23' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	98d 04' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	568158.9 5360837.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	0	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2014 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2014	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	July 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	0 01/01/1900
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	10/07/2014
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0050(033)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
10' x 10' x 76' PRCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-111-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	152	99	150	1	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	100	2	0	0	0	0	0	0
Notes: _										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10/07/2014- Structure posted 35 mph on both ends. 7/2016 - Spall area upper NW corner west outside barrel

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-119-16.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Major Collector
04 City	MORTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05018 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST OF LANKIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	17.796	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 18' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 54' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	581170.4 5351431.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	20 Tons
27 Yr Built	1977 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	415 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	13.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 01, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X9X104' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-119-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	207	99	205	1	2	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	2	0	0	100	2	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
8403/3:Drop Inlet	each	2	100	2	0	0	0	0	0	0

Remarks: NBI Remarks: Minor separation at construction joint with seepage. Minor cracking in north wings. Some guardrail posts broken on both sides. Drop inlet both ends. Structure posted 20 tons both ends. Diagonal cracking both south wings with seepage. 10/31/14 - Center construction joint open 1" @ the top & 1 1/2" @ the floor measured @ the west joint, some minor movement since last inspection. Slope protection north end only. 10/2016 - 10/01/2018 No change in joint opening.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-121-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	29.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	VERNON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	FOREST RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH 3 EAST OF LANKIN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 19' 31.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 51' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	584051.4 5353081.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 16 28 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 9 17 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	27 Gravel/Dirt	209 Posted in "Tons"	07 Tons
Age and Service		Appraisal	
27 Yr Built	1948 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	5 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 10, 2019
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.7 Ft.	Other Special	N
48 Length of Max Span	26 Ft.	218 Channel Profile	1 48 08/05/2015
49 Structure Length	27.89 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	06/15/2017
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, inspector1
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 50-121-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/2:Timber Deck	sq.ft	506	100	506	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	233	0	0	0	0	100	233	0	0
Notes:Rusting to all Steel Girders. See Photo. - 12/10/2019										
1000/2:Corrosion	ft	181	0	0	0	0	100	181	0	0
Notes:Rusting and minor pitting to bottom flanges of all Steel Girders. See Photo. - 12/10/2019										
1900/2:Distortion	ft	52	0	0	0	0	100	52	0	0
Notes:Both Outside Girders near East Abutment Bending inwards due to loss of bearing. See Photo and Alert code 1. - 12/10/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of effectiveness. - 12/10/2019										
215/2:Re Conc Abutment	ft	36	0	0	0	0	50	18	50	18
4000/2:Settlement	ft	36	0	0	0	0	50	18	50	18
Notes:West Abutment Settled at NW Corner. East Abutment Settled at SE Corner. East Abutment inward movement at the bottom and outward movement at the top causing lean. Refer to Alert Code 3 for lean and settlement measurements. See Photos. Severe spalling at NE and SE Corners. Spalling to East Abutment End Wall. U-Shape cracking to East Abutment. - 12/10/2019										
332/1:Timb Bridge Railing	ft	56	46	26	0	0	0	0	54	30
1140/1:Decay/Section Loss	ft	15	0	0	0	0	0	0	100	15
Notes:Complete section loss at Corners of both North and South Railing. - 12/10/2019										
7000/1:Damage	ft	15	0	0	0	0	0	0	100	15
Notes:Damage to all Corners of both North and South Railings. - 12/10/2019										
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/1:Settlement	each	2	0	0	100	2	0	0	0	0
Notes:Slope Protection at both East and West Abutments settled and displaced. - 12/10/2019										
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
1080/2:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes:SE Wing Separated from East Abutment due to the settling and lean. See Photo. - 12/10/2019										

Remarks: 12/28/2004: Settlement measurements this inspection. W abutment NW corner is 9" lower than SW corner. E abutment SE corner is 3" lower than NE corner. East abutment been unchanged at 12" on a 4 ft. level. Bottom moving in. 10 ft. of timber curb missing or damaged. Severe bearing loss under fascia beam, SE corner, due to large crack & spall out in abutments, see file photos. 12/18/2006 - Settlement this inspection continues to increase. NW and SE corners of structure have dropped to 10 3/4" and 6" respectively, compared to lateral opposite corner. Structure placed under alert code 3, due to uneven settlement, steel stringers are twisting, causing warping and cracking in east abutment. Both abutments have footings exposed. Lean unchanged E Abutment. 9/14/2007 - Lean unchanged East abutment. No measurement on West abutment. Level shots indicate no change in lateral movements. 01/12/2009 - No level shots taken due to deep snow on deck. Lean on east abutment unchanged. NBI Remarks: No bridge end markers or railings. Some sections of timber curb missing cracking and spalling between stringers east abutment. Rusty girders and some rotting deck plank. Embankment erosion behind both north wings. No lean change and no change in level shots 11/2010. Level shots & lean measurements in 2011 indicate little or no movement. Level shots in 2013 show a different 1.32', 1.29' in 2012, west to east south side indicating some additional settlement @ the SE corner east abutment - 1.22' in 2007. 11/2015 - Riprap added at the SE wing and both north wings. 9/13/2016 - No change in level shot or lean measurements in 2016 or 2017, 2018. Channel bank erosion up and downstream. Inspection incomplete in November 2019 due to the completion of the Incomplete October 2019 Inspections. Inspection Completed 12/10/2019. - 12/10/2019

Alert Code 1: Both footings exposed. Both outside girders near the east abutment bending inward due to loss of bearing area concrete. - 12/10/2019

Structure Number: 50-121-15.0

Alert Code 2: Large vertical crack and spalling exposing reinforcing steel southeast corner of east abutment. See photo. - 12/10/2019

Alert Code 3: Bottom of east abutment moving inward 12 1/2" in 4'. NW corner of west abut settled 10.85". SE corner of the east abutment settled 6.66". Level shots in 2013 show a difference of 1.22' west to east on the south side and 0.28' on the north side indicating a settlement at the SE corner of the east abutment. Severe cracking & separation @ the east abutment footing due to settlement & rotation. Level shots indicate some additional minor settlement in 2013. 11/4/2015 - Level shots indicate a difference of 1.32' west to east on the south side no change on north side.no change in lean measurements or in settlement. - 6/4/14 - 9/2018 No change in lean measurement or level shot difference. 12/2019 - no Change in the 12 1/2" Lean in 4'. No Level Shots taken due to frozen conditions and snow. - 12/10/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-124-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	MEDFORD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N BRANCH FOREST RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH OF FORDVILLE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 15' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 47' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	589212.8 5345103.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2003 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	150 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	20.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	August 31, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-50(015)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 12X12X50' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-124-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Sediment buildup of 1.5' in the east barrel. Vegetation & sediment buildup north side of the east barrel. Channel flows thru the west barrel. Channel cleanout south side in 2018.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-127-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	24.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	EDEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	FOREST RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	14 SOUTH OF PARK RIVER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 11' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 43' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	594369.5 5339019.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 13 23 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 8 15 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	13 Tons
Age and Service		Appraisal	
27 Yr Built	1923 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	26 30 Year of ADT 2019	72 App. Rdwy. Alignment	3 Intolerable - Correct
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 05, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	Y 24 12/05/2019
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.1 Ft.	Other Special	N
48 Length of Max Span	68 Ft.	218 Channel Profile	1 48 08/06/2015
49 Structure Length	71.85 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, inspector1
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-127-24.0

Structure Number: 50-127-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,259	81	1,019	14	180	5	60	0	0
1140/1:Decay/Section Loss	sq.ft	240	17	40	58	140	25	60	0	0
Notes:Decay to underside of deck planks. See Photo. - 12/5/2019										
1150/1:Check/Shake	sq.ft	40	0	0	100	40	0	0	0	0
113/2:Steel Stringer	ft	623	0	0	0	0	100	623	0	0
1000/2:Corrosion	ft	623	0	0	0	0	100	623	0	0
Notes:Rusting to all Stringers. See Photo. - 12/5/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of Effectiveness. - 12/5/2019										
120/2:Steel Truss	ft	141	0	0	0	0	0	0	100	141
1900/2:Distortion	ft	141	0	0	0	0	0	0	100	141
Notes:Both Truss B-B Sections bowed outwards 2"-3". See photo. - 12/5/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of effectiveness. - 12/5/2019										
152/2:Steel Floor Beam	ft	75	0	0	0	0	100	75	0	0
1000/2:Corrosion	ft	75	0	0	0	0	100	75	0	0
Notes:Rusting to all Floor Beams. See Photo. - 12/5/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of Effectiveness. - 12/5/2019										
215/3:Re Conc Abutment	ft	36	0	0	0	0	0	0	100	36
1180/3:Abrasion	ft	36	0	0	0	0	0	0	100	36
Notes:Severe abrasion and flaking of both abutments with severe section loss up to 8" to lower portion of South Abutment (See Photo) and up to 4" to entire North Abutment. See Photos. - 12/5/2019										
330/1:Metal Bridge Railing	ft	141	0	0	50	70	50	71	0	0
1900/1:Distortion	ft	141	0	0	50	70	50	71	0	0
Notes:Distortion to both railings from vehicle damage and truss movement. See Photo. - 12/5/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of Effectiveness. - 12/5/2019										
332/1:Timb Bridge Railing	ft	141	100	141	0	0	0	0	0	0
4000/3:Settlement	each	1	0	0	0	0	0	0	100	1
Notes:Both abutments with inward movement at the top and outward movement at the bottom causing lean. See Alert Code 3 for measurements. See Photo. - 12/5/2019										
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Scour hole along South Abutment. - 12/5/2019										
8401/3:Wings	each	4	0	0	0	0	0	0	100	4
1190/3:Abrasion(PSC/RC)	each	4	0	0	0	0	0	0	100	4

Structure Number: 50-127-24.0

Notes: Severe flaking and wear to all wings with section loss up and and more then 4" exposing reinforcing steel. See Photo. Spalling at tops of NW and NE Wings. See Photos. Erosion behind SW and SE Wings. See Photos. - 12/5/2019

Remarks: 2/29/2004: Extreme movement in south abutment. Top has moved 5.9' inward, a change of 0.2 tenths since last inspection. County has replaced numerous deck plank and all curb. The east upper truss section is bowed. photo on file. Severe section loss to abutments and wings, lower portions. North Estimated 4", South up to 8". Both abutments leaning. North increased 1/2" to 3 1/2" in 4 ft. South stayed same at 2 1/4" in 4 ft.. No change in level shots in 2016. 12/29/06 - Movement South abutment measured at SE corner now 6.0 Ft. Lean unchanged North abutment. Unable to check south abutment - Thin Ice. 9/10/07 - Level shots taken. NW corner is settling. (0.64' differential across truss) Spring running out of bank off this corner. Lean check North abutment increased to 4 1/8" in 4'. 01/13/2009 - Lean unchanged on north abutment. South abutment lean not checked due to thin ice. SE corner still at 6' of movement measured at top. 12/2010 - Rusty truss members & stringers. Embankment erosion behind NW & SW wing. Poor vertical & horizontal roadway alignment. Level shots taken in 2010 show a 0.66 difference from east to west on the north end & 0.17' on the south end. North abutment, a change from 0.64' and 0.14' in 2007. Some timber deck planks replaced. No change in level shots in 2011, 2012 or 2013. 2017, 2018, and 2019. Some rotting deck planks underside of Bridge Deck. See Photo. Inspection incomplete in November due to the completion of the Incomplete Inspection from 2019 October County Inventory. Inspection completed 12/5/2019. - 12/5/2019

Alert Code 1: Tree Growth at SW and NW Wings. See Photo. - 12/5/2019

Alert Code 2: South abutment leans away 2 1/4" in 4'. South abutment footing exposed. Severe bump @ both ends due to poor vertical alignment. 11/2015 - No measurements of lean at south abutment in 2015 due to deteriorating concrete. Upper truss B-B section bows outward to the east approximately 2". 9/2018 - Roadway embankment settling at the SW corner of the south abutment exposing stringers. See Photo. - 12/5/2019

Alert Code 3: 12/2010 - South abutment moved inward 6.33' @ the SE corner, a change from 6.25' in 2010 & 6.00' in 2009. No change in inward movement of the south abutment observed in 2012. Bent D-D sections. Concrete section loss up to 3" north abutment. 4 to 12" of concrete section loss to the lower portion of the south abutment. South abutment inward movement now measures @ 6.45', a change from 6.33' measured in 2010, no movement was measured in 2011 or 2012. Severe scaling of concrete exposing reinforcing steel both abutments. North abutment leans in 5 1/4" in 4', no change in 2012 or 2013. 4 1/2" in 4' previously. 10/15/14 - Level shots in 2014 indicated a 0.17 different on the south end & a 0.68' difference north end. Addition inward movement measured @ the SW corner south abutment - now measures 6.53', a change from 6.45' in 2013. 11/2015 - Undermining of the south abutment at SW corner. North abut leans in 5.5" in 4', 5.25 before. South abut inward movement now measures 6.58'. Continous movement oobserved in 2015. Level shots indicate no difference at either end .17" on the south end and .68' on the north end. 11/2017 - No change in movement. 9/2018 - North abutment leans in 6" in 4' a change from 5.25". Level shots in 2018 - .17' difference south end, .69' north end, 1.37' drop from the SW to the NW corner and .84' from the SE to NE. No change in the Level Shots in 2019. Unable to measure south abutment lean due to severe concrete deterioration. Inward movement of the south abutment now measures 6.73'. A change from 6.67' in 2018 and 6.58' in 2017. Continous movement in 2018. 12/2019. No Change in the 6" Lean at North Abutment. No lean measured at South Abutment due to Scour Hole and deteriorated concrete. - 12/5/2019

Fracture Critical: Fraction Critical Inspection completed with no additional used. A telescoping ladder used for Inspection. - 12/5/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-129-20.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Major Collector
04 City	EDEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05029 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 10 SO. PARK RIVER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.400	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 15' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 41' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	597440.8 5345735.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	23 Tons
27 Yr Built	2001 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	75 30 Year of ADT 2014	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	July 20, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	SC-5029(052)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14X6X50' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-129-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor channel alignment from the west. Large tree branch against west side of structure blocking flow. Structure posted 23 ton.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-130-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	40.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	EDEN TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 10 S PARK RIVER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 15' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	599059.7 5345240.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	0 Failed
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	0 Failed
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 7 13 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 4 9 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	08 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed	1995	
42 Type of Service	1 Highway - On	67 Structural Condition	0 Closed
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	26 30 Year of ADT	2019	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	December 05, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	18 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	21 Ft.	Other Special	N
49 Structure Length	23.95 Ft.	218 Channel Profile	1 48 08/06/2015
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, inspector1
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 50-130-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	581	0	0	100	581	0	0	0	0
Notes:Structure closed by County Forces. See Photo. - 12/5/2019										
107/2:Steel Opn Girder/Beam	ft	144	0	0	100	144	0	0	0	0
Notes:Structure closed by County Forces. See Photo. - 12/5/2019										
1000/2:Corrosion	ft	144	0	0	100	144	0	0	0	0
Notes:Structure closed by County Forces. See Photo. - 12/5/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Structure closed by County Forces. See Photo. - 12/5/2019										
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:Structure closed by County Forces. See Photo. - 12/5/2019										
111/2:Timber Open Girder	ft	262	99	260	1	2	0	0	0	0
Notes:Structure closed by County Forces. See Photo. - 12/5/2019										
1170/2:Split/Delamination (Timber)	ft	2	0	0	100	2	0	0	0	0
Notes:Structure closed by County Forces. See Photo. - 12/5/2019										
206/2:Timber Column	each	10	40	4	0	0	10	1	50	5
Notes:Structure closed by County Forces. See Photo. - 12/5/2019										
1160/2:Crack (Timber)	each	3	0	0	0	0	0	0	100	3
Notes:Structure closed by County Forces. See Photo. - 12/5/2019										
1170/2:Split/Delamination (Timber)	each	2	0	0	0	0	50	1	50	1
Notes:Structure closed by County Forces. See Photo. - 12/5/2019										
1900/2:Distortion	each	1	0	0	0	0	0	0	100	1
Notes:Structure closed by County Forces. See Photo. - 12/5/2019										
216/2:Timber Abutment	ft	49	51	25	0	0	0	0	49	24
Notes:Structure closed by County Forces. See Photo. - 12/5/2019										
1900/2:Distortion	ft	24	0	0	0	0	0	0	100	24
Notes:Structure closed by County Forces. See Photo. - 12/5/2019										
235/2:Timber Pier Cap	ft	50	50	25	0	0	0	0	50	25
Notes:Structure closed by County Forces. See Photo. - 12/5/2019										
1900/2:Distortion	ft	25	0	0	0	0	0	0	100	25
Notes:Structure closed by County Forces. See Photo. - 12/5/2019										
332/1:Timb Bridge Railing	ft	49	100	49	0	0	0	0	0	0
Notes:Structure closed by County Forces. See Photo. - 12/5/2019										
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
Notes:Structure closed by County Forces. See Photo. - 12/5/2019										
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
Notes:Structure closed by County Forces. See Photo. - 12/5/2019										
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
Notes:Structure closed by County Forces. See Photo. - 12/5/2019										

Structure Number: 50-130-21.0

Remarks: 12/29/2004: County has removed center pier. No change in existing superstructure. Old piling cut off and remain in channel. See photos. South abutment cap tilting back splitting, west end pile, see photo. NBI Remarks: Some fire damage to southwest wing and southwest corner of south cap. County forces removed center pier in 2004. Poor channel alignment from the west. Old piling in center of channel. Vehicle damage to south end deck plank west side. No BEM's north end. Posted 8 tons. 7/2018 - Structure closed by county. 12/2019 - Structure verified for closure. Barricades and Signs not weighed down. See Photo. Inspection incomplete in November due to the completion of the incomplete inspections from 2019 October County Inventory. Inspection completed 12/5/2019. - 12/5/2019

Alert Code 1: Vehicle damage to south end deck plank. Scour hole along north abutment 6' x 35' x 2.0' deep. - 12/5/2019

Alert Code 2: Roadway embankment settling behind south end abutment corners - See photos. North abutment approximately 1.0' lower than south abutment. - 12/5/2019

Alert Code 3: 9/2016 - South abutment cap tilted back causing splitting of upper portion of piles 1 - 5. Pile #1 south abutment cracked near the bottom pile #5 split, @ the top open to approximately 4" not supporting cap. South abutment bowing inward @ top. Bump @ south end of structure. Continued inward movement of the south abutment and tilting away of the south abutment cap observed in 2016. 11/2017 - Informed Walsh co and Bridge of severe distortion of South abutment and split piles. - 12/5/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-131-01.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	52.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	GLENWOOD TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF HOOPLE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 32' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 38' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	600043.3 5376915.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 31 57 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 19 34 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	212 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	190 30 Year of ADT 2014	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 04, 2018
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.7 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 08/04/2015
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	06/15/2017
51 Bridge Rdwy Width - Curb to Curb	20.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sourm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 50-131-01.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	592	100	592	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	276	0	0	0	0	100	276	0	0
1000/2:Corrosion	ft	76	0	0	0	0	100	76	0	0
Notes: _										
1900/2:Distortion	ft	200	0	0	0	0	100	200	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
215/3:Re Conc Abutment	ft	39	0	0	46	18	54	21	0	0
1080/3:Delamination/Spall/Patched Area	ft	4	0	0	0	0	100	4	0	0
Notes: _										
1130/3:Cracking (RC and Other)	ft	17	0	0	0	0	100	17	0	0
Notes: _										
1190/3:Abrasion(PSC/RC)	ft	18	0	0	100	18	0	0	0	0
Notes: _										
331/1:Re Conc Bridge Railing	ft	56	0	0	100	56	0	0	0	0
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	25	1	0	0	0	0	75	3

Remarks: NBI Remarks: No railing. Poor channel alignment. Deteriorating concrete lower portion both abutments. Three wings falling into channel. Up to 1" of section loss to both abutments. Slight sag to all girders. All BEM's missing. Structure posted sharp curve 35 MPH thru structure, north end signs vandalized.

Alert Code 1: Scour hole under structure, 20' x 28' x 3' deep. Large horizontal crack center of north abutment. Horizontal & vertical cracks both abutments. Up to 1" of section loss to both abutments. Slight sag to all girders.

Alert Code 2: Severe cracking at wing corners-southwest corner open 5" at top to 0" at 7' down, northwest corner open 5" at top to 0" at 5' down. Outside stringer setting in crack on southwest corner. Roadway embankment settling behind both abutment corners west side encroaching in the roadway.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-131-01.2

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Major Collector
04 City	GLENWOOD TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05002 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 NORTH OF HOOPLE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	22.195	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 32' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	598726.4 5377538.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2008 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	250 30 Year of ADT 2014	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 06, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRC-3432(051)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14 X 7 X 50' RCBC		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-131-01.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 01/14/2009 - New Box Culvert 12/2010 - Channel bank erosion both banks up and downstream. 10/7/2014 - Tree branch lodged against north headwall.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-131-03.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Major Collector
04 City	GLENWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05006 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	IIDDLE BRANCH PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 7 NORTH PARK RIVER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	31.793	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 29' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 39' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	599662.4 5372713.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	297 30 Year of ADT 2016	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	14 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	16 Ft.	Other Special	N
49 Structure Length	33.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	06/07/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRC-5006(063)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Suedel
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 16 X 12 X 50' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-131-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	100	100	100	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 9/2016 - New box in 2016. 9/2018 - Channel bank erosion downstream and tree debris in channel north of structure.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-131-22.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Major Collector
04 City	EDEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05022 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST OF CONWAY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	32.993	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 13' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 38' 52.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	600434.9 5342058.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1994 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	225 30 Year of ADT 2014	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	July 19, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	46.3 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, PRECAST 12'X4'X46' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-131-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	95	100	95	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Large amount of vegetation in channel both sides. Riprap at all wings. 7/2018 - NW corner culvert marker missing.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-133-09.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	24.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	FERTILE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 2 NORTH PARK RIVER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 25' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 36' 05.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	603491.0 5363887.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	3 Serious
Structure Type and Material		60 Substructure	2 Critical
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	3 Steel	Load Rating and Posting	
	02 Stringer/Girder	31 Design Load	Unknown
45 No. Spans in Main Unit	1		P Posted for load
46 No. Approach Spans	1	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 7 13 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 4 9 Tons
208 Dk Overburden	1 None	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	8 Tons
27 Yr Built	1909 106 Yr Reconstructed	1925	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	2 Intolerable - Replace
28 Lanes on Structure	2	68 Deck Geometry	3 Intolerable - Correct
29 ADT	30 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	-1.00	71 Waterway Adequacy	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	3 Intolerable - Correct
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	12 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	December 05, 2019
34 Skew	0.00	91 Designated Inspection Frequency	18 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	16.4 Ft.	Fracture Critical	Y 24 12/05/2019
48 Length of Max Span	50 Ft.	Underwater	N
49 Structure Length	63.98 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	218 Channel Profile	1 48 08/04/2015
	0.7 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	16.7 Ft.	207 Transporter Erector Routes and Sites	
52 Deck Width	17.7 Ft.	212 Structure Load Rated	01/01/1901
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Nefstead, inspector1
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-133-09.1

Structure Number: 50-133-09.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,141	58	656	7	75	35	400	1	10
1140/1:Decay/Section Loss	sq.ft	250	0	0	20	50	80	200	0	0
Notes:Section loss to top areas of Deck Planks and Decay molding to underside of various deck planks. See Photos. - 12/5/2019										
1170/1:Split/Delamination (Timber)	sq.ft	210	0	0	0	0	95	200	5	10
Notes:Complete section loss to Plank near South Abutment. See photo. Various splits to eco planks. See Photo. - 12/5/2019										
1180/1:Abrasion	sq.ft	25	0	0	100	25	0	0	0	0
Notes:Wear to various deck planks. See Photo. - 12/5/2019										
113/2:Steel Stringer	ft	482	0	0	0	0	93	450	7	32
1000/2:Corrosion	ft	450	0	0	0	0	100	450	0	0
Notes:Rusting to all Stringers with minor section loss to flanges and upper flanges. See Photo. - 12/5/2019										
1900/2:Distortion	ft	32	0	0	0	0	0	0	100	32
Notes:Portions of West and East outside Stringers damaged. See Photo. - 12/5/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No coating. Loss of Effectiveness. - 12/5/2019										
120/2:Steel Truss	ft	52	0	0	0	0	100	52	0	0
1000/2:Corrosion	ft	52	0	0	0	0	100	52	0	0
Notes:Rusting to entire truss. See Photo. - 12/5/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of Effectiveness. - 12/5/2019										
152/2:Steel Floor Beam	ft	39	0	0	0	0	0	0	100	39
1000/2:Corrosion	ft	39	0	0	0	0	0	0	100	39
Notes:Rusting to both Floor Beams with minor section loss to upper portions. See Photo. - 12/5/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No coating. Loss of Coating causing no effectiveness. - 12/5/2019										
202/2:Steel Column	each	4	0	0	0	0	0	0	100	4
1900/2:Distortion	each	4	0	0	0	0	0	0	100	4
Notes:Outward and inward movement to all Cans causing moderate to severe lean. See Alert Code 3 for Measurements. - 12/5/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of Effectiveness. - 12/5/2019										
206/2:Timber Column	each	6	17	1	0	0	33	2	50	3
1140/2:Decay/Section Loss	each	2	0	0	0	0	0	0	100	2
Notes:Complete section loss to east piling of South Abutment and interior decay at Center Column of South Abutment. See Photos. - 12/5/2019										
1900/2:Distortion	each	3	0	0	0	0	67	2	33	1

Structure Number: 50-133-09.1

Notes: Severe crushing from movement at North Abutment. See Photo. Distortion to North Abutment from movement. See Photo. - 12/5/2019										
216/2: Timber Abutment	ft	36	50	18	50	18	0	0	0	0
1140/2: Decay/Section Loss	ft	18	0	0	100	18	0	0	0	0
Notes: Section loss to North Abutment form Top Back Plate separating. See Photo. - 12/5/2019										
231/2: Steel Pier Cap	ft	16	0	0	0	0	0	0	100	16
1000/2: Corrosion	ft	16	0	0	0	0	0	0	100	16
Notes: Rusting to Pier Cap. See Photo. - 12/5/2019										
515/2: Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2: Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: No Coating. Loss of Effectiveness. - 12/5/2019										
235/2: Timber Pier Cap	ft	23	0	0	83	19	17	4	0	0
1140/2: Decay/Section Loss	ft	4	0	0	0	0	100	4	0	0
Notes: Minor section loss to North Abutment Pier Cap. - 12/5/2019										
1900/2: Distortion	ft	19	0	0	100	19	0	0	0	0
Notes: South Abutment cap tilting back and both Abutments. See Photo. - 12/5/2019										
330/3: Metal Bridge Railing	ft	66	0	0	0	0	100	66	0	0
1900/3: Distortion	ft	33	0	0	0	0	100	33	0	0
Notes: Portions of east and west railing distorted. See Photo. - 12/5/2019										
7000/3: Damage	ft	33	0	0	0	0	100	33	0	0
Notes: Damage to both railings. See Photo. - 12/5/2019										
515/3: Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/3: Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: No Coating. Loss of effectiveness. - 12/5/2019										
332/1: Timb Bridge Railing	ft	66	46	30	0	0	46	30	9	6
1140/1: Decay/Section Loss	ft	36	0	0	0	0	83	30	17	6
Notes: Areas of section loss along East Curb and complete removal of curb not anchored near SW Corner. See Photo. - 12/5/2019										
7357/3: Pack Rust	each	1	0	0	100	1	0	0	0	0
Notes: Pack Rust to Connection Plates of B-B and C-C Members. See Photo. - 12/5/2019										
7362/2: Superstructure Traffic Impact	each	1	0	0	100	1	0	0	0	0
Notes: Damage to East and West outside stringers. See Photo. - 12/5/2019										
8401/2: Wings	each	4	100	4	0	0	0	0	0	0

Structure Number: 50-133-09.1

Remarks: 2/4/2003 - 10' of timber curb rotted and missing. Minor chuck holes in deck, numerous rotting plank. Code 2. Bolt broke off in metal cap connector at NW, between cap and can. 1/5/2005 - 20 ft of railing bent from collision damage. Rotting pile 2 piles in south abutment, approach span, 1 pile in north abutment, see photo. Checking lean of cans, no change except for NW can. Increased from 6 3/4" to 7". Alert code 2. 12/27/2006 - Leaning checked on all four cans: Lean on 4' level: SE 5 1/2" no change, SW 6 3/4" Increase of 1/4", NE 5 1/4" Increase of 1/4", NW 7 5/8" increase of 5/8". Numerous holes in deck. Steel cap between north cans twisting putting stress on connections to columns. SW truss bearing area stressed. See Photo. Alert Code 3. 9/17/2007 - Lean checked on all four cans. Noted change SW corner now 7" in 4' 01/20/2009 - County has signed the bridge No Trucks Restricted Bridge. South No trucks faded. See photo. SE can lean increased to 6" on 4' level, NE increased to 5.5". Between south cans and floor beam #1, fascia channel beams sagged and twisted. See photo NBI Remarks: Vehicle damage both railings. Poor horizontal roadway alignment. Severely rusted truss members and stringers. One inch conduits attached to both sides of structure. Some deck planks replaced in 2013. Tree growth near NW, NE and SE Cans See Photo. Inspection incomplete in November due to completing incomplete inspections from October 2019 County Inventory. Structure completed 12/5/2019. - 12/5/2019

Alert Code 1: Severe channel bank erosion north bank. Severe rusting of upper flange with section loss stringers no. 2 and 5 north span. - 12/5/2019

Alert Code 2: Numerous rotting cracked and loose deck plank. See Photos. Broken diagonal brace rod between columns on south pier. West timber pile north abutment crushing. Second stringer span 2 not resting on floor beam. One bolt missing can connection to I-beam NW corner. Two cracked and severely rotting timber piles south abutment. Pack rust distressing upper chord pin connections @ B-B & C-C. See Photo. North end deck plank settling away exposing stringers and allowing roadway filtration at the upper backwall. Severe bump at north end of structure. See Photo. - 12/5/2019

Alert Code 3: (9/2018 - No change in lean measurements.south end posting sign unreadable. Section of timber curb unattached at the SW corner. See Photo All west outside stringers bent and tipping with some sag. See Photo. No change in lean in 2011. Connection plate separating from the southeast and Northwest pier can-see photo.12/2010 - Barrels lean south - NW = 8" in 4', NE = 5 1/2" in 4', SW = 7 1/4" in 4', SE = 6 1/4" in 4' - continued movement in 2010. No additional lean observed in 2012,2013,2014,2015 or 2016. 11/2017 - east outside pile south abutment missing. Steel column measurements NW 8",NE 5.75", SW 8", SE 7" in 4'. Walsh Co. and Bridge notified. 12/2019 - No Change in Lean to NW, NE, SW, and SE Cans. - 12/5/2019

Fracture Critical: Fracture Critical Inspection completed with no additional equipment used. Telescoping Ladder used for Inspection. Inspection completed 12/5/2019. - 12/5/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-134-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	GLENWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 10 NORTH PARK RIV.	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 32' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 35' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	604250.5 5377630.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	6 Corrugated Steel	64 Oper. Rating	HS 32 57 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 19 35 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	205 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed	1980	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT	2014	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	June 12, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	30 Ft.	Other Special	N
49 Structure Length	49.87 Ft.	218 Channel Profile	1 48 08/04/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/15/2017
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 50-134-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
30/1:Steel Deck - Orthotropic	sq.ft	1,206	99	1,194	0	0	1	12	0	0
7000/1:Damage	sq.ft	12	0	0	0	0	100	12	0	0
510/1:Wearing Surfaces	sq.ft	1,206	100	1,206	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	620	0	0	100	620	0	0	0	0
1000/2:Corrosion	ft	620	0	0	100	620	0	0	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:_										
206/2:Timber Column	each	18	89	16	11	2	0	0	0	0
1170/2:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
Notes:_										
216/2:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	79	0	0	100	79	0	0	0	0
1000/2:Corrosion	ft	73	0	0	100	73	0	0	0	0
Notes:_										
1900/2:Distortion	ft	6	0	0	100	6	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:_										
8401/2:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: NBI Remarks: No curb. No bridge end markers. Old piling in channel under structure. Both rail missing. Three bowed girders in the east span. Two north outside pile east abutment split at top and open to 1/2". Some blade damage to corrugated deck. 6/2016 - Top back wall plank tilting away at the west abutment. Vegetation and sediment buildup in channel north of structure.

Alert Code 1: 6/2018 - Both east wings seperating at the abutment corners. Rock placed behind wings see photos. Roadway gravel filtering thru the damaged deck @ the NW corner.

Alert Code 2: Cap sagging between 2 end pile on south end of pier approximately 1/2" to 3/4".

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-134-08.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	FERTILE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 3 NORTH PARK RIVER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 26' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 34' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	605088.2 5365804.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	September 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	25.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	52.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	02/03/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sourm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
TRIPLE 14 X 14 X 56' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-134-08.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	174	100	174	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 1/26/2017 - BRIDGE REPLACED WITH BOX CULVERT. 9/2018 -1" of sediment east end of south barrel.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-135-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	58.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	GLENWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	7 WEST 7 NORTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 31' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 34' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	605181.8 5376032.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	8 Wood or Timber	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	7 Wood or Timber	64 Oper. Rating	HS 10 18 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	None	66 Inv. Rating	HS 6 11 Tons
208 Dk Overburden	100 None	70 Bridge Posting	0 >39.9% below
Age and Service		209 Posted in "Tons"	10 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2014	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	June 12, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.9 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	41.01 Ft.	218 Channel Profile	1 48 08/04/2015
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	26.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-135-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,130	78	878	21	240	1	12	0	0
1140/1:Decay/Section Loss	sq.ft	12	0	0	0	0	100	12	0	0
Notes: _										
1180/1:Abrasion	sq.ft	240	0	0	100	240	0	0	0	0
Notes: _										
111/2:Timber Open Girder	ft	495	100	495	0	0	0	0	0	0
206/2:Timber Column	each	16	100	16	0	0	0	0	0	0
216/2:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	79	91	72	9	7	0	0	0	0
7000/2:Damage	ft	7	0	0	100	7	0	0	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Channel bank erosion east bank south of structure. Old piling in channel. New W-beam railing installed in 2004. Vehicle damage to east end posted sign. Some worn & rotting deck planks. One broken guardrail post southeast corner. 6/2018 - West end posted sign missing.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-135-01.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	GLENWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST OF HOOPLE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 32' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 33' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	606286.0 5377666.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	6 Corrugated Steel	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 46 84 Tons
208 Dk Overburden	204 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1989 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2014	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	June 12, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	21 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 08/04/2015
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	06/16/2017
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 50-135-01.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
30/1:Steel Deck - Orthotropic	sq.ft	764	100	764	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	764	100	764	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	344	0	0	100	344	0	0	0	0
1000/2:Corrosion	ft	344	0	0	100	344	0	0	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
206/3:Timber Column	each	16	100	16	0	0	0	0	0	0
216/3:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	43	81	35	19	8	0	0	0	0
1140/1:Decay/Section Loss	ft	4	0	0	100	4	0	0	0	0
Notes: _										
7000/1:Damage	ft	4	0	0	100	4	0	0	0	0
Notes: _										
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8398/3:Slope Protection	each	2	50	1	0	0	50	1	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railing. Riprap added under structure. Three bridge end markers missing. Minor vehicle damage to east end south curb and west end north curb. Heavy vegetation in channel both sides.

Alert Code 1: 6/2016 - Scour hole along east abutment 9' x 15' x 3' deep. Riprap displaced at east abutment.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-135-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	OPS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 10 SOUTH GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 16' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 33' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	607041.4 5347862.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1995 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	80 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 01, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	25.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	45.93 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-50(10)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUADRUPLE, 10X6X50' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-135-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	200	85	170	15	30	0	0	0	0
1130/3:Cracking (RC and Other)	ft	30	100	30	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor horizontal crack in upper portion of the far north wall. 12/2010 - Minor horizontal cracks in second barrel from the north. Minor cracing with seepage both headwalls. Vegetation in channel both sides.
10/2016 - Tree growth near all wings. 10/2018 tree debris blocking flow on west side.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-136-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	GLENWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N BRANCH OF PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 WEST 6 NORTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 30' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 33' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	606871.4 5374450.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 29 54 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2000 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2014	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 12, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	46 Ft.	Other Special	N
49 Structure Length	91.86 Ft.	218 Channel Profile	1 48 08/02/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.5 Ft.	213 Federal Aid Project Number	DPI-0036(006)501
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-136-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,842	100	2,842	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	374	100	374	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	30	100	30	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	197	100	197	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Tree growth near all 4 wings. No BEMS.**Alert Code 1:** Channel bank erosion upstream & downstream.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-136-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	67.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	GLENWOOD TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 WEST 5 NORTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 30' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 32' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	608179.2 5372918.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 18 34 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 11 20 Tons
Dk Protect	None	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	201 Gravel/Dirt	209 Posted in "Tons"	23 Tons
Age and Service		Appraisal	
27 Yr Built	1924 106 Yr Reconstructed	1976	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	2014	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	June 12, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	21.0 Ft.	Underwater	N
48 Length of Max Span	37 Ft.	Other Special	N
49 Structure Length	58.07 Ft.	218 Channel Profile	1 48 08/02/2015
50 Curb/Sidewalk Widths	0.5 Ft Rt-Side	Chaining Date	None
	0.5 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/16/2017
	21.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-136-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,270	100	1,270	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	512	0	0	97	496	0	0	3	16
1000/2:Corrosion	ft	496	0	0	100	496	0	0	0	0
Notes: _										
1900/2:Distortion	ft	16	0	0	0	0	0	0	100	16
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes: _										
206/3:Timber Column	each	12	100	12	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	23	17	4	0	0	83	19	0	0
1080/2:Delamination/Spall/Patched Area	ft	16	0	0	0	0	100	16	0	0
Notes: _										
1090/2:Exposed Rebar	ft	3	0	0	0	0	100	3	0	0
Notes: _										
216/1:Timber Abutment	ft	23	0	0	100	23	0	0	0	0
1900/1:Distortion	ft	23	0	0	100	23	0	0	0	0
231/2:Steel Pier Cap	ft	23	0	0	100	23	0	0	0	0
1000/2:Corrosion	ft	23	0	0	100	23	0	0	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes: _										
235/2:Timber Pier Cap	ft	46	50	23	0	0	50	23	0	0
1900/2:Distortion	ft	23	0	0	0	0	100	23	0	0
Notes: _										
332/1:Timb Bridge Railing	ft	115	0	0	39	45	17	20	43	50
1140/1:Decay/Section Loss	ft	65	0	0	69	45	31	20	0	0
Notes: _										
7000/1:Damage	ft	50	0	0	0	0	0	0	100	50
Notes: _										
8401/2:Wings	each	4	75	3	25	1	0	0	0	0
4000/2:Settlement	each	1	0	0	100	1	0	0	0	0
Notes: _										

Remarks: NBI Remarks: No railings. Minor embankment erosion at end of northwest wing. Spalling upper portion north abutment under beams. Moderate tipping back of south cap. Poor horizontal roadway alignment from the south. Vehicle damage to curbs both sides. Timber backwall planks have settled from east to west with roadway embankment filtering through. Honeycombing to the lower portion of the north abutment. Sections of timber curb missing both sides. Section loss up to 2" lower portion of north abutment. 12/2010 - No BEM's southeast side. Sediment buildup west side south span, channel flows thru north span. Structure posted south end only with back to back signs. 10-16-2014 - Channel bank erosion near both south wings.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-136-03.0

Alert Code 1: East outside channel beam bowed out and not supporting any of the deck.

Alert Code 2: 6/2016 - South abutment moving in at the top causing the cap to tilt away. All piles supporting 65% of the cap. 6/2018 - North abutment appears to be settling from pier #2 to the north abutment.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-137-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	FARMINGTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 5 NORTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 29' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 30' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	609837.6 5372523.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 32 58 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 19 35 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	204 Gravel/Dirt	209 Posted in "Tons"	Tons
Age and Service		Appraisal	
27 Yr Built	1963 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	100 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 12, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.9 Ft.	Other Special	N
48 Length of Max Span	45 Ft.	218 Channel Profile	1 48 08/02/2015
49 Structure Length	47.90 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.5 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.5 Ft Lt-Side	212 Structure Load Rated	06/16/2017
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	26.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-137-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,270	100	1,270	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	364	0	0	100	364	0	0	0	0
1000/2:Corrosion	ft	364	0	0	100	364	0	0	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
Notes:_										
206/3:Timber Column	each	14	100	14	0	0	0	0	0	0
216/3:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	96	100	96	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Channel runs along north abutment. No railing east side. Rail missing west side, 3 posts remain - See Photo.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-139-06.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	34.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	GRAFTON TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 WEST 2 NORTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 27' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 28' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	612268.4 5368097.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	46 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	28 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	26 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1930 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	4 Tolerable
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 05, 2019
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.1 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 08/04/2015
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	06/21/2017
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, inspector1
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 50-139-06.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	538	89	478	0	0	11	60	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	35	0	0	0	0	100	35	0	0
Notes:Moderate spalling underside of side and South edge of deck. See Photos. - 12/5/2019										
1090/1:Exposed Rebar	sq.ft	25	0	0	0	0	100	25	0	0
Notes:Spalling with exposed rebar underside of deck mainly in-between girders 1 and 2 from the South. See Photo. Various other areas underside of deck. - 12/5/2019										
107/2:Steel Opn Girder/Beam	ft	253	0	0	89	225	0	0	11	28
1000/2:Corrosion	ft	225	0	0	100	225	0	0	0	0
Notes:Rusting to all Girders. See Photo. - 12/5/2019										
1900/2:Distortion	ft	28	0	0	0	0	0	0	100	28
Notes:I-Beams welded under stringers against both Abutments. See Photo. - 12/5/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	25	25	75	75
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	25	25	75	75
Notes:Limited to no effectiveness of the coating. - 12/5/2019										
215/3:Re Conc Abutment	ft	36	0	0	50	18	0	0	50	18
1190/3:Abrasion(PSC/RC)	ft	18	0	0	100	18	0	0	0	0
Notes:Wear along bottom of West abutment. With section loss exposing aggregate. See Photo. - 12/5/2019										
4000/3:Settlement	ft	18	0	0	0	0	0	0	100	18
Notes:East Abutment outward movement and top and inward movement at the bottom causing lean away. See Alert code 3 for Measurements. - 12/5/2019										
331/1:Re Conc Bridge Railing	ft	59	92	54	9	5	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
Notes:Minor spalling along south end of Curb. - 12/5/2019										
8401/2:Wings	each	4	75	3	0	0	0	0	25	1
1080/2:Delamination/Spall/Patched Area	each	1	0	0	0	0	0	0	100	1
Notes:Northeast wing completely separated from East Abutment causing spalling and exposed rebar. See photo. See Alert Code 3. - 12/5/2019										

Remarks: No railings. Minor spalling underside of deck exposing reinforcing steel. I-Beam pieces welded under stringers against abutments. Debris & garbage under structure. Old timber piling in channel. No BEM SE Corner. Structure posted sharp curve, 10 mph advisory signs both ends. 10 MPH Signs faded. Restricted Bridge and No Trucks signs on both sides of structure approx. 1/4 mile. No trucks signs on both sides of Structure. See Photo. Inspection incomplete in November due to the completion of the Incomplete inspections from October 2019 County Inventory. Inspection completed 12/5/2019. - 12/5/2019

Alert Code 1: Vertical cracks in east abutment with one open to 1/8" and one open to 1/4". Spalling to lower portion of both abutments with 1" loss west and 1" to 3" loss east abutment. Both abutments moved inward - west abutment 12", east abutment 8". No change in 2014. West Abutment No Change in Inward Movement Observed. Measurement taken at NW Corner from Front Face of Wing to Front Face of End Wall. - 12/5/2019

Alert Code 2: Severe channel bank erosion east bank & behind east wings. See Photos. Northeast wing separating from abutment exposing rebar and major section loss to the outside foot of abutment, See Photo. Roadway embankment filtering thru wing & abutment NE corner. East abutment has settled approximately 6" - 8" from south to north @ the northeast corner. East abutment moving in @ the bottom & leans away 5" in 4' measured @ center. 10/2016 - East abutment moving in at the bottom. Leans away 5 3/4" in 4' measured at center, a change from 5" in 4'. - 12/5/2019

Alert Code 3: 10/2018 - East abutment moving in at the bottom and leans away 6 3/8" in 4'. A change from 5.75" and 5" in previous inspections. Additional movement and settlement in 2018. 12/2019 - East abutment lean at 6 3/4" in 4' Measured at center. Previous inspection at 6 3/8". Additional Lean Observed. NE Wing completely separated from Abutment. See photos. - 12/5/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-139-14.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	VALSH CENTRE TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 4 SOUTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 21' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 28' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	613327.0 5356781.9	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	0	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2012 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2014	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	September 25, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	0 01/01/1900
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/27/2012
	0.0 Ft.	213 Federal Aid Project Number	BRO-0050(028)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
DOUBLE 12 X 7 X 50' PCRBC			

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-139-14.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 9/2012 - New structure in 2012. Approach pipe enters the channel near the southwest wing.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-139-19.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Major Collector
04 City	FOREST RIVER CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05039 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 10 SOUTH GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.199	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 16' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 28' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	613518.6 5347323.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	420 30 Year of ADT 2016	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	September 06, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	15 Ft.	Other Special	N
49 Structure Length	32.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	10/19/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 15 X 9 X 50' PCBC		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-139-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	100	100	100	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 9/2016 - Bridge replaced with new box culvert.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-139-21.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Major Collector
04 City	FOREST RIVER CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05039 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 11 SOUTH GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.799	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 14' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 28' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	613557.7 5345040.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	420 30 Year of ADT 2017	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	October 02, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	02/03/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 12 X 10 X 50' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-139-21.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10/2016- Bridge replaced with box culvert.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-140-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	VALSH CENTRE TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 3 SOUTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 22' 09.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 26' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	614894.4 5358507.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2006 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	26 30 Year of ADT 2014	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	September 25, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	5.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	2.3 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10'X 5'X 52' PCBC		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-140-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	104	100	104	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No culvert end markers east side. Minor vertical cracks with seepage both headwalls.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-141-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	VALSH CENTRE TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LOOD DIVERSION CHANNEL	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 23' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 25' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	616453.1 5361694.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	January 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	50.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	40.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	12/26/2018
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
TRIPLE 12 X 6 X 50' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-141-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	150	96	144	3	4	1	2	0	0
1080/1:Delamination/Spall/Patched Area	ft	6	0	0	67	4	33	2	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 01/2019 - New in 2018. Some minor spalls in the roof.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-142-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	FARMINGTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	8 NORTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 32' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 24' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	617809.6 5377861.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 42 76 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 25 46 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1966 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	10 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 05, 2018
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	20 Ft.	218 Channel Profile	1 48 08/02/2015
49 Structure Length	22.97 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	03/23/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sourm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 50-142-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	549	91	499	9	48	0	0	0	2
1140/1:Decay/Section Loss	sq.ft	50	0	0	96	48	0	0	4	2
Notes: _										
107/2:Steel Opn Girder/Beam	ft	220	0	0	68	150	32	70	0	0
1000/2:Corrosion	ft	220	0	0	68	150	32	70	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	67	67	33	33
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	67	67	33	33
Notes: _										
206/2:Timber Column	each	12	75	9	17	2	8	1	0	0
1160/2:Crack (Timber)	each	1	0	0	0	0	100	1	0	0
Notes: _										
1170/2:Split/Delamination (Timber)	each	2	0	0	100	2	0	0	0	0
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	49	0	0	0	0	100	49	0	0
1000/2:Corrosion	ft	49	0	0	0	0	100	49	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0

Remarks: 1/6/2005 - SW wing pile rotted in half, upper wing plank not supported. NBI Remarks: No railings. No curbs. No bridge end markers. Slight scour along south abutment. Broken pile south west wing. Small chuck hole in deck. Pile #3 & 5 south abutment split @ top & open to 1/2". 9/2016 - Broken pile and cracked wing planks at the SW wing.

Alert Code 1: 09/2011 - Scour hole under bridge 20' x 20' x 1' deep. 10/21/14 - Pile #1 north abutment cracked near the bottom.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-142-01.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	41.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	FARMINGTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	8 NORTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 32' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 24' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	617008.0 5377864.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 0 0 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 0 0 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	0 Closed
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	10 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 05, 2018
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	45.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	1 48 08/02/2015
49 Structure Length	38.06 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sourm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 50-142-01.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	904	100	904	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	443	0	0	92	409	8	34	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
206/3:Timber Column	each	18	100	18	0	0	0	0	0	0
216/3:Timber Abutment	ft	89	100	89	0	0	0	0	0	0
4000/3:Settlement	each	1	0	0	0	0	0	0	100	1
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: No bridge end markers, railings or curbs. Top of SW wing plank broke. Structure closed in 2007, 2009 & 2010,2012,2014 and Structure still closed 09/19/2016. And 2018.

Alert Code 1: Girder #12 bowed, girder #13 tilted outward and resting on outer flange NE corner of east abutment. Southwest wing separating from abutment with hollow area behind wing and corner of abutment. Very poor channel alignment. SW corner of deck planks tilting back near hollow area behind SW wing.

Alert Code 2: South outside girder tilting and setting on bottom flange edge. West abutment leans in 6 1/4" in 4' on the south end and 7 1/4" on the north end. East abutment leans in 3" in 4 feet on the north end and 3" in 4' on the south end.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-142-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	28.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	FOREST RIVER CITY	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	FOREST RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	11 SOUTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 15' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 24' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	617824.4 5346333.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	2 Critical
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	4	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 6 10 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 3 7 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	06 Tons
Age and Service		Appraisal	
27 Yr Built	1953 106 Yr Reconstructed	1965	
42 Type of Service	1 Highway - On	67 Structural Condition	2 Intolerable - Replace
	5 Waterway - Under	68 Deck Geometry	3 Intolerable - Correct
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	December 10, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	18 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	16.7 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	79.07 Ft.	218 Channel Profile	1 48 08/01/2015
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	18.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Nefstead, inspector1
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 50-142-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,421	74	1,056	18	250	8	115	0	0
1140/1:Decay/Section Loss	sq.ft	115	0	0	0	0	100	115	0	0
Notes:Areas of section loss from rotting and decay to underside of structure mainly in Span 3 and 4. See Photo. - 12/10/2019										
1150/1:Check/Shake	sq.ft	200	0	0	100	200	0	0	0	0
Notes:Check shaking on to of deck planks. - 12/10/2019										
1170/1:Split/Delamination (Timber)	sq.ft	50	0	0	100	50	0	0	0	0
Notes:Minor splitting of deck planks. - 12/10/2019										
107/2:Steel Opn Girder/Beam	ft	440	0	0	100	440	0	0	0	0
1000/2:Corrosion	ft	440	0	0	100	440	0	0	0	0
Notes:Rusting to all Girders. See Photo. - 12/10/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:No Coating. Loss of Effectiveness. - 12/10/2019										
111/2:Timber Open Girder	ft	659	0	0	38	249	5	31	58	379
1140/2:Decay/Section Loss	ft	659	0	0	38	249	5	31	58	379
Notes:Decay with section loss or complete removal of various Timber Girders. See ALert Code 3 and Photos. - 12/10/2019										
206/2:Timber Column	each	27	89	24	4	1	7	2	0	0
1160/2:Crack (Timber)	each	2	0	0	0	0	100	2	0	0
Notes:Piles 3 and 4 cracked near the bottom. See Photo. - 12/10/2019										
1170/2:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes:Pile 2 Minor split South Abutment. - 12/10/2019										
216/2:Timber Abutment	ft	36	100	36	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	105	93	98	3	3	4	4	0	0
1140/2:Decay/Section Loss	ft	7	0	0	43	3	57	4	0	0
Notes:Section loss near East end of South Abutment. See photo. Section loss to West end of North Abutment. - 12/10/2019										
332/1:Timb Bridge Railing	ft	157	100	157	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 2/12/2003 - In Span #1, timber double stringer #7 has rotted away and fell out. In span #4 at north abutment double timber stringer #8 is rotted and crushing. No metal rail east side. 5' of timber curb missing east side. 2/01/2005 - No railings on structure, only timber curb. Extensive rotting in deck and timber stringers. Many deck planks showing signs of rot. Timber stringers in addition to those listed in 2/12/03 inspection showing extensive signs of rot in bearing area. 1/18/2007 - Span #1 1/2 of double timber #9 rotted out. Span #4 1/2 of double timber #9 rotted out. 9/21/2007 - Stringers #1, #2, #3, #7, #9 at north abutment crushing and rotting. Steel stringers in wheel paths center of bridge. Stringer #8, span 4 has fallen out of structure. (alert code 3) 01/30/2009 - 1/2 of double stringer #8 span 2 rotted out. Double stringer #9 span 3 rotted out & laying in channel. Double stringer #9 span 4 in channel. NBI Remarks: South channel bank erosion upstream and downstream. Some planks replaced. No railing. Bridge division: March 2003-load rating reduced because of missing stringers. Poor vertical roadway alignment south end. Steel stringers in the wheel path. 10/2018 - Posted 6 tons. 12/2019 - Tree growth new SE Abutment. Top Plank at NE Wing broken off. New Timber Curb installed by County Forces. No Change in widths or size and type of curb. Inspection incomplete in November 2019 due to the completion of the October 2019 County Inspections. Inspection Complete 12/10/2019. - 12/10/2019

Alert Code 1: Channel bank erosion upstream and downstream. Tree debris buildup against west side piers #2 & #3. - 12/10/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-142-20.0

Alert Code 2: Severe channel bank erosion west side of pier #4. Piles #3 & 4 south abutment cracked near the bottom. Some rotting deck planks. - 12/10/2019

Alert Code 3: Stringers 1, 2, 3, 7 & 9 at the north abutment rotting and crushing. Span #1: stringers 3, 9 & 13 rotted, cracked and crushing, Stringer #7 missing. Span #2: Stringer #8 rotting and crushed. Span #3: Stringers # 9 rotting and crushing, stringers #8, #9 & #13 missing. Span #4: Stringer #8 missing, #9 rotting and crushing, double timber stringers #13 & 14 have one cracked stringer. - 12/10/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-143-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	39.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	MARTIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	8 NORTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 32' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 23' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	619042.0 5377886.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 5 9 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 3 6 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	6 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	24 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 05, 2018
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 08/02/2015
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 50-143-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	592	29	172	70	414	0	0	1	6
1140/1:Decay/Section Loss	sq.ft	200	0	0	97	194	0	0	3	6
Notes: _										
1180/1:Abrasion	sq.ft	220	0	0	100	220	0	0	0	0
Notes: _										
111/2:Timber Open Girder	ft	377	81	305	0	0	13	50	6	22
1140/2:Decay/Section Loss	ft	46	0	0	0	0	100	46	0	0
Notes: _										
1900/2:Distortion	ft	26	0	0	0	0	15	4	85	22
Notes: _										
206/3:Timber Column	each	12	100	12	0	0	0	0	0	0
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	52	50	26	50	26	0	0	0	0
1900/2:Distortion	ft	26	0	0	100	26	0	0	0	0
Notes: _										
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb or railing. Slight tilt back to south abutment cap. Some rotting of all deck plank underside of deck. Two timber girders crushing, #5 at the north abutment, #13 at the south abutment. Timber girder # 17 is twisted and bows inward at the bottom. 9/2018 - North end posted sign unreadable.

Alert Code 1: Small scour hole along south abutment - 5' x 10' x 1.5' deep.

Alert Code 2: 9/2018 - 2 holes in deck 1' x 5' and 1' x 1'.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-143-11.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	43.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	OAKWOOD TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 23' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 23' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	618479.7 5360764.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 3 6 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 2 4 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	4 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	26 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 05, 2018
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 07/31/2015
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.5 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 50-143-11.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	592	76	452	17	100	6	34	1	6
1140/1:Decay/Section Loss	sq.ft	40	0	0	0	0	85	34	15	6
Notes:_										
1180/1:Abrasion	sq.ft	100	0	0	100	100	0	0	0	0
Notes:_										
111/2:Timber Open Girder	ft	367	100	367	0	0	0	0	0	0
206/3:Timber Column	each	10	100	10	0	0	0	0	0	0
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	49	100	49	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	25	0	0	0	0	100	25	0	0
Notes:_										
1000/1:Corrosion	ft	25	0	0	0	0	100	25	0	0
Notes:_										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
Notes:_										
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:_										
332/1:Timb Bridge Railing	ft	25	0	0	100	25	0	0	0	0
Notes:_										
1140/1:Decay/Section Loss	ft	25	0	0	100	25	0	0	0	0
Notes:_										
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0

Remarks: 1/12/2005 - East railing removed. NBI Remarks: Some new deck planks added. Timber curb rotting. Old piling in channel under structure. Rotting wing piles. No curb, railing or BEM's east side. Vehicle damage to south end deck plank. 9/2018 - North end posted sign vandalized. South end sign is missing.

Alert Code 1: Scour hole under structure 22' x 40' x 2' deep. 9/2016 - Hole in deck north end 6" x 3'.

Alert Code 2: 9/2018 - Damage to north end deck plank. Hole in deck 1' x 5' and 1' x 1'.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-143-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	VALSH CENTRE TOWNSHI	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HARRIET DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	5 SOUTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 20' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 23' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	619682.9 5355341.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2004 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2014	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	September 05, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.0 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	22.97 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 11X7X28' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-143-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	56	100	56	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/2010 - Two BEM's missing. Wing sections separating up to 1.5" both ends. Riprap displaced south side.
9/2016 - Some minor sediment buildup in both barrels.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-144-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	82.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	MARTIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 8 NORTH GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 32' 34.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 21' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	620652.4 5377918.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 21 39 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 13 23 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	24 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 05, 2018
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	26 Ft.	218 Channel Profile	1 48 08/02/2015
49 Structure Length	28.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	03/23/2017
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sourm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-144-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	689	100	689	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	338	0	0	50	169	50	169	0	0
1000/2:Corrosion	ft	338	0	0	50	169	50	169	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	50	50	50	50
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	50	50	50	50
Notes: _										
111/2:Timber Open Girder	ft	157	75	117	25	40	0	0	0	0
1140/2:Decay/Section Loss	ft	30	0	0	100	30	0	0	0	0
Notes: _										
1160/2:Crack (Timber)	ft	10	0	0	100	10	0	0	0	0
Notes: _										
206/3:Timber Column	each	12	100	12	0	0	0	0	0	0
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	56	100	56	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railings. One minor split in timber girder #5. 9/2018 - No BEM s on east side.

Alert Code 1: Scour along south abutment 24' x 8' x 3' deep.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-144-10.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	ACTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	# 87 DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 S OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 23' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 21' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	621049.1 5361833.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	G New-Not Yet Open
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	38 Ft.	90 Date of Last Inspection	November 28, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.67 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/28/2018
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE 12 X 12 X 60' Precast RCB		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-144-10.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	298	100	298	0	0	0	0	0	0

Remarks: _

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-144-10.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	ACTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	# 87 DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 1 S OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 23' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 22' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	620239.5 5361818.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	G New-Not Yet Open
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	38 Ft.	90 Date of Last Inspection	November 28, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.67 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/28/2018
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 12 X 12 X 60' Precast RCB		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-144-10.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	146	100	146	0	0	0	0	0	0

Remarks: _

Structure Number: 50-144-18.3

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Major Collector
04 City	MINTO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05018 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	CITY OF MINTO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	43.590	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 17' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 22' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	620817.8 5350472.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1982 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	800 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	6.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 09, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 10'X8'X50' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 50-144-18.3

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	151	0	0	99	150	1	1	0	0
1090/3:Exposed Rebar	ft	1	0	0	0	0	100	1	0	0
1900/3:Distortion	ft	150	0	0	100	150	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 2/12/2003 - Large spallout NE corner where wing meets wall. Rebar exposed. End walls north side delaminating (deteriorating). 1/17/2007 - Center construction joint opening up to as much as 2" east barrel. NBI Remarks: Minor cracking with seepage at wing corners. Deteriorating concrete to the lower portion of the west inside wall north side. Spalling with exposed reinforcing steel at upper corner northeast wing and wall. Construction joint backplate in place with no seepage.

Alert Code 1: West outside construction joint open 1/4" top and 1.75" bottom. East outside wall joint open 1/2" at top and 2" the bottom, no change in 2012 or 2014. North barrel settled approximately 1 1/2" @ construction joint. Minor joint opening movement west side in 2016 & 2018. Vegetation blocking flow south end center and east barrels. Minor 1' deep scour hole off north end center barrel.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-145-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	OAKWOOD TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 NORTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 26' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 20' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	622542.2 5367302.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 20 37 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 14 27 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	34 Tons
Age and Service		Appraisal	
27 Yr Built	1920 106 Yr Reconstructed	2010	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT	2017	3 Intolerable - Correct
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	September 22, 2016
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	26 Ft.	Other Special	N
49 Structure Length	54.50 Ft.	218 Channel Profile	1 48 07/02/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Nefstead
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 50-145-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,308	76	988	25	320	0	0	0	0
1180/1:Abrasion	sq.ft	320	0	0	100	320	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	101	0	0	0	0	100	101	0	0
1000/1:Corrosion	ft	101	0	0	0	0	100	101	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
111/2:Timber Open Girder	ft	664	96	640	4	24	0	0	0	0
1180/2:Abrasion	ft	24	0	0	100	24	0	0	0	0
202/3:Steel Column	each	12	0	0	0	0	100	12	0	0
1000/3:Corrosion	each	12	0	0	0	0	100	12	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
206/2:Timber Column	each	6	83	5	17	1	0	0	0	0
1170/2:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	52	0	0	0	0	100	52	0	0
1000/2:Corrosion	ft	52	0	0	0	0	100	52	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
235/2:Timber Pier Cap	ft	77	87	67	0	0	13	10	0	0
1900/2:Distortion	ft	10	0	0	0	0	100	10	0	0
4000/3:Settlement	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 01/22/2009 - County posted structure at 10 MPH. 8/18/2010 - New Timber deck new abutment caps, added steel pile #2 north abutment and riprap to both ditches where they enter the channel west side. Replace cracked girders with I beams in 2010. Roadway embankment settling SW corner south abutment with some vehicle damage to south end deck planks. No BEM's No curb or railing.

Alert Code 1: South end cap tilting back and both caps are sagging. Numerous loose deck planks. Bump @ bridge ends. North cap tilted back. Cap is almost completely off the west end abutment pile. Some deck planks replaced.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-145-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	ACTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	# 87 DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 25' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 14' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	621291.2 5364552.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2018 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2018	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	38 Ft.	90 Date of Last Inspection	November 27, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.67 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/28/2018
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 12 X 12 X 60' Precast RCB		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-145-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	120	100	120	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: _

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-146-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	24.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	MARTIN TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 4 NORTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 29' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	624040.9 5371741.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	3 Serious
99 Border Bridge Struct No.	–	59 Superstructure	3 Serious
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 11 20 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 6 12 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	13 Tons
Age and Service		Appraisal	
27 Yr Built	1930 106 Yr Reconstructed	1964	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	3 Intolerable - Correct
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT	2014	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	June 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	16.7 Ft.	Underwater	N
48 Length of Max Span	30 Ft.	Other Special	N
49 Structure Length	32.15 Ft.	218 Channel Profile	1 48 08/02/2015
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	212 Structure Load Rated	06/22/2017
52 Deck Width	18.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 50-146-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	560	11	60	0	0	80	450	9	50
1140/1:Decay/Section Loss	sq.ft	500	0	0	0	0	90	450	10	50
107/2:Steel Opn Girder/Beam	ft	269	0	0	0	0	98	264	2	5
1000/2:Corrosion	ft	269	0	0	0	0	98	264	2	5
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
215/3:Re Conc Abutment	ft	36	0	0	89	32	11	4	0	0
1130/3:Cracking (RC and Other)	ft	4	0	0	0	0	100	4	0	0
Notes: _										
330/3:Metal Bridge Railing	ft	66	0	0	0	0	100	66	0	0
1000/3:Corrosion	ft	46	0	0	0	0	100	46	0	0
Notes: _										
1900/3:Distortion	ft	10	0	0	0	0	100	10	0	0
Notes: _										
7000/3:Damage	ft	10	0	0	0	0	100	10	0	0
Notes: _										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
332/1:Timb Bridge Railing	ft	66	0	0	100	66	0	0	0	0
1140/1:Decay/Section Loss	ft	66	0	0	100	66	0	0	0	0
Notes: _										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: NBI Remarks: Vehicle damage to both railings. Spalling at top corners of abutments. Vertical cracks in south abutment. Poor channel alignment. Scour along south abutment. Bridge div: Bridge Rated with BrR with 50% section loss in web. Posted 5 tons axle, 13 tons gross. H piles added for support under girders four, five, six and seven north abutment. BEM's missing. Posted signs vandalized.

Alert Code 1: 12/2010 - South abutment footing exposed due to scour hole 35' x 20' x 3.5' deep & lack of riprap. 4" of section loss to concrete at abutment corners where wings meet abutment, large spalls north abutment and wings. Bump @ bridge ends.

Alert Code 2: Beams four, five, six and seven have major rusting causing severe section loss in webs where beams meet north abutment. Fifty percent of webs gone. 12/2010 - Sag in girders #1, #2, #8 and #9. #2 and #8 sagged up to 1". #1 and #9 sagged up to 1 1/2". Center cross I-beam brace bowed downward on each end due to sag in girders. 20% of web gone in girder #6 south abutment, this girder is not shimmed with an H-pile this end. Numerous rotting deck planks, three 6" x 12" holes in deck. 6/2018 - South abutment footing widening & has seperated from the abutment causing exposd piles & undermining of the south abutment to a depth of 2'.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-146-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	OAKWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 25' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	624188.9 5365340.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	4 Protection Undermined
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 26 48 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2006 106 Yr Reconstructed	2014	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	7 Above Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	5 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	-1.00	71 Waterway Adequacy	6 Equal Minimum
19 Bypass, Detour Length	2 Miles	72 App. Rdwy. Alignment	5 Above Tolerable
Geometric Data		36 Traffic Safety Features	0 0 0 0
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	8 Stable Above Footing
32 Approach Roadway Width	14 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	September 06, 2018
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	24.0 Ft.	Fracture Critical	N
48 Length of Max Span	47 Ft.	Underwater	N
49 Structure Length	49.87 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	218 Channel Profile	1 48 08/02/2015
	0.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb		207 Transporter Erector Routes and Sites	-1
	24.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	24.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sourm
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 50-146-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
15/1:Pre Concrete Top Flange	sq.ft	1,197	100	1,197	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	300	100	300	0	0	0	0	0	0
202/3:Steel Column	each	12	0	0	0	0	100	12	0	0
1000/3:Corrosion	each	12	0	0	0	0	100	12	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
216/2:Timber Abutment	ft	48	100	48	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	52	0	0	0	0	100	52	0	0
1000/2:Corrosion	ft	52	0	0	0	0	100	52	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
235/2:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Structure replaced in 2006. Poor vertical alignment. No curb or bridge rail. 3 BEM's missing. Poor channel alignment from the west. Under contract in 2014 - 6 new steel columns, new timber cap, new timber abutment backwall planks @ south abutment. Repaired piling & wing planks southeast wing. 9/2016 - Some minor embankment erosion behind SW wing.

Alert Code 1: Some channel bank erosion north bank east side of structure. Severe erosion to the ditch where it enters the channel near the SW wing.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-147-04.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	MARTIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 4 NORTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 29' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 19' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	624123.2 5371521.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 43 78 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 23 42 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	20 Tons
27 Yr Built	1980 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	14 Ft.	90 Date of Last Inspection	June 04, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.9 Ft.	Underwater	N
48 Length of Max Span	33 Ft.	Other Special	N
49 Structure Length	37.07 Ft.	218 Channel Profile	1 48 08/02/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-147-04.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
16/1:Re Conc Top Flange	sq.ft	937	100	937	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	230	100	230	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	59	88	52	12	7	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
Notes: _										
1130/2:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
331/1:Re Conc Bridge Railing	ft	72	100	72	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Poor channel alignment to the south. 12/2010 - East posted signs vandalized. West sign missing. Vertical & diagonal cracking both abutments with some seepage west abutment. Riprap placed in SW ditch erosion area where it enters the channel near SW wing - See Photo. Minor vertical cracks in both jersey barriers. 6/2016 - Posted one side only.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 50-147-05.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	88.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Major Collector
04 City	MARTIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05047 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 3 NORTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	14.197	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 28' 17.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 17' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625678.7 5370098.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 28 50 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 13 24 Tons
208 Dk Overburden	301 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1969 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	160 30 Year of ADT 2014	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	1 48 08/02/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-147-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	381	99	377	1	4	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes: _										
206/2:Timber Column	each	16	100	16	0	0	0	0	0	0
216/2:Timber Abutment	ft	66	100	66	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	79	100	79	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: 1/10/2005 - Old steel piling in channel - See photo. 6/2016 - Channel bank erosion up and down stream.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-148-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	ST. ANDREWS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 7 NORTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 31' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 16' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	627146.5 5376420.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 44 80 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 28 52 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1988 106 Yr Reconstructed -1	67 Structural Condition	8 Equal Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	24 30 Year of ADT 2014	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 07, 2018
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 08/02/2015
49 Structure Length	81.04 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-148-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	2,368	100	2,366	0	0	0	2	0	0
1160/1:Crack (Timber)	sq.ft	2	0	0	0	0	100	2	0	0
Notes:_										
111/2:Timber Open Girder	ft	623	100	623	0	0	0	0	0	0
202/3:Steel Column	each	7	0	0	0	0	100	7	0	0
1000/3:Corrosion	each	7	0	0	0	0	100	7	0	0
Notes:_										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:_										
206/3:Timber Column	each	22	100	22	0	0	0	0	0	0
216/2:Timber Abutment	ft	56	100	56	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	33	0	0	0	0	100	33	0	0
1000/2:Corrosion	ft	33	0	0	0	0	100	33	0	0
Notes:_										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:_										
235/2:Timber Pier Cap	ft	95	98	93	2	2	0	0	0	0
1140/2:Decay/Section Loss	ft	2	0	0	100	2	0	0	0	0
Notes:_										
332/1:Timb Bridge Railing	ft	161	94	151	0	0	6	10	0	0
1140/1:Decay/Section Loss	ft	10	0	0	0	0	100	10	0	0
Notes:_										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Vehicle damage to rail northeast corner. Some minor embankment erosion by east abutment. Channel runs along west side of pier due to vegetation and sediment buildup on east half. Old piling in channel. Slope protection riprap under structure west abutment only.

Alert Code 1: Ice nose angle north side of center pier broke away.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-148-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	43.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	ST. ANDREWS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 6 NORTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 30' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 16' 40.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	627179.8 5374810.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 11 19 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 8 16 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	14 Tons
Age and Service		Appraisal	
27 Yr Built	1977 106 Yr Reconstructed	1995	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT	2014	4 Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.3 Ft.	Underwater	N
48 Length of Max Span	25 Ft.	Other Special	N
49 Structure Length	51.84 Ft.	218 Channel Profile	1 48 08/02/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	23.6 Ft.	212 Structure Load Rated	06/23/2017
52 Deck Width	24.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-148-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,259	99	1,246	0	5	1	8	0	0
1170/1:Split/Delamination (Timber)	sq.ft	15	13	2	33	5	53	8	0	0
Notes: _										
107/2:Steel Opn Girder/Beam	ft	443	0	0	50	221	50	222	0	0
1000/2:Corrosion	ft	443	0	0	50	221	50	222	0	0
Notes: _										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	50	50	50	50
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	50	50	50	50
Notes: _										
111/2:Timber Open Girder	ft	338	11	38	0	0	74	250	15	50
1140/2:Decay/Section Loss	ft	300	0	0	0	0	83	250	17	50
Notes: _										
202/3:Steel Column	each	6	0	0	0	0	100	6	0	0
1000/3:Corrosion	each	6	0	0	0	0	100	6	0	0
Notes: _										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes: _										
206/2:Timber Column	each	11	82	9	9	1	0	0	9	1
1140/2:Decay/Section Loss	each	1	0	0	0	0	0	0	100	1
1170/2:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
Notes: _										
216/2:Timber Abutment	ft	49	43	21	6	3	51	25	0	0
1140/2:Decay/Section Loss	ft	6	0	0	50	3	50	3	0	0
Notes: _										
1900/2:Distortion	ft	22	0	0	0	0	100	22	0	0
231/2:Steel Pier Cap	ft	26	0	0	0	0	100	26	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	79	44	35	53	42	0	0	3	2
1140/2:Decay/Section Loss	ft	5	0	0	60	3	0	0	40	2
1900/2:Distortion	ft	39	0	0	100	39	0	0	0	0
332/1:Timb Bridge Railing	ft	103	76	78	0	0	0	0	24	25
7000/1:Damage	ft	25	0	0	0	0	0	0	100	25
Notes: _										
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
8398/1:Slope Protection	each	1	0	0	100	1	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-148-02.0

Remarks: NBI Remarks: No curbs. Rotting and cracking of timber girders. Minor fire damage to south 3 girders span 1, and south 2 girders span 2. Center pier piling rusting at waterline. West abutment cap tilting back slightly on north end. Vegetation and sediment buildup just north of structure blocking portion of channel. Minor fire damage to underside of deck and west abutment cap. Poor vertical roadway alignment. Some loose & split deck planks. Minor fire damage to girders 13 & 14 span #1. 6/2018 - No BEM's on north side.

Alert Code 1: South end east abutment timber cap rotting. Timber column #4 east abutment rotting near the waterline.

Alert Code 2: 09/2011 - Scour thru center of channel at center pier approximately 10' each side of pier 20' x 36' x 4' deep. Girder #3 span #1 missing, Girder #15 span #1 cracked & broken near center of span & failed. Timber girders #1, 2, 13 & 14 in span #1 are split & rotting near the center of the beam entire length.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-148-05.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Major Collector
04 City	MARTIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05006 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 3 NORTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	50.189	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 28' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 17' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625870.1 5369951.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 38
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 23
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	206 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	262 30 Year of ADT 2014	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 07, 2018
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.9 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	1 48 08/02/2015
49 Structure Length	40.03 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.7 Ft Lt-Side	212 Structure Load Rated	08/02/2018
51 Bridge Rdwy Width - Curb to Curb	28.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 50-148-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	377	100	377	0	0	0	0	0	0
206/3:Timber Column	each	16	88	14	0	0	13	2	0	0
1160/3:Crack (Timber)	each	1	0	0	0	0	100	1	0	0
Notes: _										
1170/3:Split/Delamination (Timber)	each	1	0	0	0	0	100	1	0	0
Notes: _										
216/3:Timber Abutment	ft	66	50	33	50	33	0	0	0	0
1900/3:Distortion	ft	33	0	0	100	33	0	0	0	0
235/2:Timber Pier Cap	ft	66	50	33	50	33	0	0	0	0
1900/2:Distortion	ft	33	0	0	100	33	0	0	0	0
Notes: _										
330/1:Metal Bridge Railing	ft	79	100	79	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	79	100	79	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0

Remarks: NBI Remarks: 12/2010 - Channel bank erosion both banks up and downstream. Old piling in channel. 6/2016 - Top wing planks separating from piling both south wings. Tree growth near SE wing.

Alert Code 1: West abutment cap bowed outward approximately 4 to 5" and tilting back. Pile #7 east abutment open 1/2" @ top to 1 1/2" @ bottom. Pile #6 cracked near the bottom.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-148-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	OAKWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 2 NORTH GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 27' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 16' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	627314.1 5368204.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 45 81 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1999 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2017	71 Waterway Adequacy	4 Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	October 25, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	50.85 Ft.	218 Channel Profile	1 48 08/02/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	27.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 50-148-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	167	100	167	0	0	0	0	0	0
202/2:Steel Column	each	16	0	0	0	0	100	16	0	0
1000/2:Corrosion	each	16	0	0	0	0	100	16	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
216/1:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	60	100	60	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	60	100	60	0	0	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No curb or railing. Poor horizontal and vertical roadway alignment. Minor section loss to abutment piles at water line. I-Beam ice protection beam west side of structure unattached north end - See photo. All BEM's missing. Metal culvert enters the channel near the southwest wing.

Alert Code 1: Severe channel bank erosion to the north bank just east of structure. Channel bank erosion near all wings.

Alert Code 2: 10/2018 - Scour hole 2 x 2 x 1.5" deep behind SW corner south abutment near wheel path.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-148-08.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Major Collector
04 City	OAKWOOD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05047 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 1 NORTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	11.498	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 25' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 17' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	625876.8 5365756.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 25 46 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	160 30 Year of ADT 2014	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	11.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	56 Ft.	Other Special	N
49 Structure Length	148.95 Ft.	218 Channel Profile	1 48 08/02/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	31.2 Ft.	213 Federal Aid Project Number	CBRS-5047(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-148-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	4,661	100	4,657	0	4	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	4	0	0	100	4	0	0	0	0
Notes: _										
104/2:Pre Clsd Box Girder	ft	581	100	581	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	59	100	59	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	66	98	65	2	1	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes: _										
330/1:Metal Bridge Railing	ft	299	100	299	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	299	100	299	0	0	0	0	0	0
8398/1:Slope Protection	each	2	50	1	50	1	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Channel bank erosion, both banks both sides of structure. Slope protection settling @ north abutment with 2 exposed piles. Tree growth near both abutment wing corners.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-149-05.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Major Collector
04 City	ST. ANDREWS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05006 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 3 NORTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	51.489	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 28' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 15' 60.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	628127.6 5370007.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2013 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	152 30 Year of ADT 2014	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	June 07, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	40.00 Ft.	218 Channel Profile	0 0 01/01/1900
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	10/15/2013
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRC-5006(061)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE 12 X 11 X 82' RCBC		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 50-149-05.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	246	99	243	1	3	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes: _										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10/15/2013 - New box in 2013. Approximately 2' sediment buildup center of west barrel. Channel bank erosion up and down stream. Spall areas at the SW & NW corners of culvert. 6/2018 - Minor separation of the wing at NW corner.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-150-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	80.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	ACTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DIPPLE DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 25' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 14' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	630406.5 5365208.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 20 36 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 12 22 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	201 Gravel/Dirt	209 Posted in "Tons"	18 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	50 30 Year of ADT 2017	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 06, 2018
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	26 Ft.	218 Channel Profile	1 48 08/02/2015
49 Structure Length	28.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	06/23/2017
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sourm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 50-150-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	689	100	689	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	364	0	0	0	0	100	364	0	0
1000/2:Corrosion	ft	364	0	0	0	0	100	364	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
206/2:Timber Column	each	12	92	11	8	1	0	0	0	0
1170/2:Split/Delamination (Timber)	each	1	0	0	100	1	0	0	0	0
216/3:Timber Abutment	ft	49	100	49	0	0	0	0	0	0
235/2:Timber Pier Cap	ft	52	94	49	6	3	0	0	0	0
1170/2:Split/Delamination (Timber)	ft	3	0	0	100	3	0	0	0	0
332/1:Timb Bridge Railing	ft	43	91	39	0	0	9	4	0	0
1170/1:Split/Delamination (Timber)	ft	4	0	0	0	0	100	4	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Old piling in channel along east abutment. Rusty girders. No bridge rail. Old concrete abutments in channel. Split in timber pile #4 east abutment open 3/8". Vegetation in channel 12/2010 - Slight sag in both abutment caps. One BEM missing north side.

Alert Code 1: Scour hole under structure 15' x 30' x 2.0' deep.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-150-08.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	ACTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 1 NORTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 26' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 14' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	630610.0 5366576.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 36 66 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 31 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	September 06, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.3 Ft.	Underwater	N
48 Length of Max Span	60 Ft.	Other Special	N
49 Structure Length	124.02 Ft.	218 Channel Profile	1 48 08/02/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sourm
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 50-150-08.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
15/1:Pre Concrete Top Flange	sq.ft	1,170	97	1,140	3	30	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	30	0	0	100	30	0	0	0	0
104/2:Pre Clsd Box Girder	ft	965	97	934	1	8	2	23	0	0
1080/2:Delamination/Spall/Patched Area	ft	23	0	0	0	0	100	23	0	0
1110/2:Cracking (PSC)	ft	8	0	0	100	8	0	0	0	0
210/3:Re Conc Pier Wall	ft	26	100	26	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	52	60	31	0	0	40	21	0	0
1080/2:Delamination/Spall/Patched Area	ft	6	0	0	0	0	100	6	0	0
1090/2:Exposed Rebar	ft	15	0	0	0	0	100	15	0	0
330/1:Metal Bridge Railing	ft	246	0	0	100	246	0	0	0	0
1000/1:Corrosion	ft	246	0	0	100	246	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
4000/3:Settlement	each	1	100	1	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/2010 - Some inward movement of south abutment. No BEM's. No change in lean measurement @ north abutment in 2010, 2012 or 2014. Some spalling with up to 2" section loss to west outside beam @ guardrail post locations west side. Old piling in channel - See photo.

Alert Code 1: 12/2010 - Spalling under all beams south abutment with exposed rebar. Spalling and cracking with exposed rebar under 4 beams north abutment. North abutment leans in at bottom 1.5" in 4'. 9/2016 No change in lean measurements or 2018. Large beaver dam west side restricting flow.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-150-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	74.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	ACTON TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DIPPLE DRAIN DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 2 SOUTH OF GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 22' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 14' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	630774.7 5360383.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 15 28 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 10 19 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	19 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	10 30 Year of ADT 2017	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic		36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 25, 2018
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	20.3 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 07/31/2015
49 Structure Length	26.90 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	20.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 50-150-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	549	69	379	7	40	15	80	9	50
1140/1:Decay/Section Loss	sq.ft	10	0	0	0	0	0	0	100	10
1170/1:Split/Delamination (Timber)	sq.ft	160	0	0	25	40	50	80	25	40
111/2:Timber Open Girder	ft	407	100	405	1	2	0	0	0	0
206/2:Timber Column	each	10	90	9	10	1	0	0	0	0
216/2:Timber Abutment	ft	39	100	39	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	52	0	0	0	0	100	52	0	0
1000/2:Corrosion	ft	52	0	0	0	0	100	52	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
235/2:Timber Pier Cap	ft	49	100	49	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/16/2012 - NBI Remarks: No railing. No curb. All BEM's missing. Timber girder #17 split with some minor crushing @ the southwest corner above the cap. 10/2018 - West end posted sign damaged. Timber planks split and deteriorating.

Alert Code 1: Bump @ east end of bridge.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-152-03.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	ST. ANDREWS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 1 NORTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 29' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	633615.9 5373422.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1972 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	2017	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	September 24, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.7 Ft.	Underwater	N
48 Length of Max Span	8 Ft.	Other Special	N
49 Structure Length	25.92 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Fischer, Sorum
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 8'X4'X34' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-152-03.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	102	100	102	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Date 1/10/2005 - Minor crack the full width across west parapet. NBI Remarks: 1' of silt buildup in center & north barrels. One minor crack along entire length of west parapet. 10/2016 - Some minor vegetation and sediment build up west side north barrel.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-152-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	ACTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 5 EAST OF CASHEL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 27' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 11' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	633723.2 5369000.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	5	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 27 50 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 16 30 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1932 106 Yr Reconstructed	2006	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	6 Equal Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	50 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	2017	71 Waterway Adequacy	7 Above Minimum
19 Bypass, Detour Length	1 Miles	72 App. Rdwy. Alignment	7 Above Min Criteria
Geometric Data		36 Traffic Safety Features	1 1 1 1
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	24 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	October 11, 2018
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	27.6 Ft.	Fracture Critical	N
48 Length of Max Span	54 Ft.	Underwater	N
49 Structure Length	189.96 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	218 Channel Profile	1 48 08/02/2015
	0.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	27.6 Ft.	207 Transporter Erector Routes and Sites	-1
52 Deck Width	32.2 Ft.	212 Structure Load Rated	06/26/2017
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Fischer, Sorum
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 50-152-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	5,700	100	5,700	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	955	100	955	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	98	98	2	2	0	0	0	0
3420/2:Peel/Bub/Crack(Stl Protect Co	sq.ft	100	98	98	2	2	0	0	0	0
210/3:Re Conc Pier Wall	ft	115	83	95	17	20	0	0	0	0
1130/3:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
215/2:Re Conc Abutment	ft	69	73	50	28	19	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	15	0	0	100	15	0	0	0	0
1130/2:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
234/2:Re Conc Pier Cap	ft	59	100	59	0	0	0	0	0	0
304/3:Open Expansion Joint	ft	30	100	30	0	0	0	0	0	0
310/1:Elastomeric Bearing	each	10	100	10	0	0	0	0	0	0
311/1:Moveable Bearing	each	36	100	36	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	380	100	380	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Repair project in 2006 consisted of repairing and replacing bridge bearings and joints. Bridge painting, bridge rail retrofit, guardrail, new deck and incidental items in 2006. Horizontal crack with seepage entire length north abutment end wall. 12/2010 - Vertical cracks in pier #2, #3 & #4. 10/2018 - Some areas of peeling paint, finish coat only.

Alert Code 1: 12/2010 - Large horizontal crack base of pier #4.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-153-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	76.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	ACTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	10 EAST 2 NORTH GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 27' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	635381.9 5368370.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 19 35 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 12 22 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1983 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	10 30 Year of ADT 2017	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 11, 2018
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	40.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	21.3 Ft.	Other Special	N
48 Length of Max Span	29 Ft.	218 Channel Profile	1 48 08/02/2015
49 Structure Length	62.99 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	21.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	23.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer, Sorum
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 50-153-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,453	82	1,193	17	240	0	0	1	20
1140/1:Decay/Section Loss	sq.ft	20	0	0	0	0	0	0	100	20
1170/1:Split/Delamination (Timber)	sq.ft	80	0	0	100	80	0	0	0	0
1180/1:Abrasion	sq.ft	160	0	0	100	160	0	0	0	0
111/2:Timber Open Girder	ft	830	96	800	4	30	0	0	0	0
1150/2:Check/Shake	ft	30	0	0	100	30	0	0	0	0
202/3:Steel Column	each	23	0	0	0	0	100	23	0	0
1000/3:Corrosion	each	23	0	0	0	0	100	23	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/3:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
216/2:Timber Abutment	ft	59	100	59	0	0	0	0	0	0
231/2:Steel Pier Cap	ft	92	0	0	0	0	100	92	0	0
1000/2:Corrosion	ft	92	0	0	0	0	100	92	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
235/2:Timber Pier Cap	ft	92	98	90	2	2	0	0	0	0
1170/2:Split/Delamination (Timber)	ft	2	0	0	100	2	0	0	0	0
332/1:Timb Bridge Railing	ft	125	64	80	0	0	24	30	12	15
1140/1:Decay/Section Loss	ft	15	0	0	0	0	0	0	100	15
1180/1:Abrasion	ft	30	0	0	0	0	100	30	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No railing. Vehicle damage to both curbs. Poor horizontal roadway alignment. Posted one lane bridge west end only. Minor section loss to steel piling up to 1/16". Rock riprap placed behind 3 of 4 wings. No BEM's north side.

Alert Code 1: 2016 - Tree drift against center pier and span 1, blocking flow thru channel. Some rotting and split deck planks.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 50-153-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	34.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Grand Forks District	22 Owner	County Hwy Agency
03 County	Walsh	26 Functional	Rural, Local
04 City	WALSHVILLE TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MORAIS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	9 EAST 11 SOUTH GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 15' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 10' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	635106.1 5345857.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	3 Serious
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	6	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 0 0 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 0 0 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1958 106 Yr Reconstructed -1	67 Structural Condition	0 Closed
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	December 05, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	20.7 Ft.	Other Special	N
48 Length of Max Span	19 Ft.	218 Channel Profile	1 48 07/31/2015
49 Structure Length	120.08 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	20.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	22.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Nefstead, inspector1
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 50-153-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
54/1:Timber Slab	sq.ft	2,648	94	2,498	0	0	1	30	5	120
Notes:Structure Closed by County Forces. - 12/5/2019										
1140/1:Decay/Section Loss	sq.ft	150	0	0	0	0	20	30	80	120
Notes:Structure Closed by County Forces. - 12/5/2019										
206/3:Timber Column	each	35	74	26	14	5	3	1	9	3
Notes:Structure Closed by County Forces. - 12/5/2019										
1170/3:Split/Delamination (Timber)	each	9	0	0	56	5	11	1	33	3
Notes:Structure Closed by County Forces. - 12/5/2019										
216/3:Timber Abutment	ft	49	49	24	51	25	0	0	0	0
Notes:Structure Closed by County Forces. - 12/5/2019										
1900/3:Distortion	ft	25	0	0	100	25	0	0	0	0
Notes:Structure Closed by County Forces. - 12/5/2019										
235/2:Timber Pier Cap	ft	171	85	146	0	0	15	25	0	0
Notes:Structure Closed by County Forces. - 12/5/2019										
1900/2:Distortion	ft	25	0	0	0	0	100	25	0	0
Notes:Structure Closed by County Forces. - 12/5/2019										
332/1:Timb Bridge Railing	ft	240	0	0	0	0	25	60	75	180
Notes:Structure Closed by County Forces. - 12/5/2019										
1140/1:Decay/Section Loss	ft	240	0	0	0	0	25	60	75	180
Notes:Structure Closed by County Forces. - 12/5/2019										
7362/1:Superstructure Traffic Impact	each	1	0	0	100	1	0	0	0	0
Notes:Structure Closed by County Forces. - 12/5/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Structure Closed by County Forces. - 12/5/2019										

Remarks: Channel sedimenting in on north side in spans 1-4, channel runs thru span #5 NBI Remarks: Channel bank erosion upstream & downstream. No bridge end markers. Tree debris removed from south side of structure in 2014. 11/6/2018 - Bridge closed by county. Structure verified for closure in 2019. See Photos. Inspection incomplete in November due to the completion of the incomplete inspections from October 2019 County System. Inspection completed 12/5/2019. - 12/5/2019

Alert Code 1: Rotted timber railing & posts. Collision damage to southwest corner of timber railing and posts with section of railing and one post missing, also post missing on north side center span. 26' of railing missing on the south side near center. Some sections of slab deck missing north side of deck creating several 3" x 12' holes in deck. - 12/5/2019

Alert Code 2: 01/2011 - Four split pile in west abutment open to 3/4" & crushing. Hole in deck 4' x 8' south side span #4 covered with metal plate. Three split pile east abutment: #1 split 1/2", 3 & 4 split & cracked approximately 3" near the top. 10/2016 - Numerous areas of rotting deck planks. West abutment moving inward causing bowing of piles and cap tilting away and setting on back portion of 3 piles. - 12/5/2019

Alert Code 3: 10/2018 - Area of failed in the north wheel path span 1. 6" wide by 18 long. Top of deck appears to be depressed in this area. - 12/5/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GRAF01

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Grand Forks District	22 Owner	City/Municipal Hwy Agenc
03 County	Walsh	26 Functional	Urban, Collector
04 City	GRAFTON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 6 Business 08540 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	WAKEMAN AVE.-GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.200	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 617755.8 5364560.0		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type :stressed concrete continuous		61 Chan. & Chan. Protection	7 Minor Damage
Slab		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type 1 Concrete-Cast-in-Place		63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface 1 Monolithic Concrete		64 Oper. Rating HS 24	44 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect 1 Epoxy Coated Reinforci		66 Inv. Rating HS 19	36 Tons
208 Dk Overburden 1	None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1984 106 Yr Reconstructed		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 875 30 Year of ADT 2019		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	42 Ft.	90 Date of Last Inspection	May 14, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	64 Ft.	Other Special	N
49 Structure Length	162.07 Ft.	218 Channel Profile	1 48 04/20/2017
50 Curb/Sidewalk Widths	3.9 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	27.9 Ft.	213 Federal Aid Project Number	BRM-6-985(04)002
52 Deck Width	37.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: GRAF01

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	6,071	100	6,040	1	31	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	6	0	0	100	6	0	0	0	0
Notes:Underside of deck at south abutment - see photo. - 5/14/2019										
205/2:Re Conc Column	each	4	100	4	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	56	100	56	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	75	100	75	0	0	0	0	0	0
314/2:Pot Bearing	each	4	0	0	100	4	0	0	0	0
1000/2:Corrosion	each	4	0	0	100	4	0	0	0	0
Notes:Minor corrosion to all pot bearings. - 5/14/2019										
331/2:Re Conc Bridge Railing	ft	325	99	320	2	5	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
1130/2:Cracking (RC and Other)	ft	89	97	86	3	3	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	25	0	0	100	25	0	0	0	0
Notes:Areas of spalling both end of deck - see photos. - 5/14/2019										
1130/1:Cracking (RC and Other)	each	90	56	50	44	40	0	0	0	0
Notes:Areas of diagonal cracking with some seepage various areas - see photo. - 5/14/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Seepage through bearing area both abutments. Numerous vertical & diagonal cracks in jersey barrier. Sidewalk settling 8" south end & 3" north end. Spalling southwest corner on the outside face of deck. Diagonal crack upper corner southwest wing. Four utility conduits attached to the outside deck and curb east side. Dam 800' west of structure. Sediment buildup under structure in span #3. Crack on top of SW wing. Four (4) spall areas in tendon tensioning area west side, south end. Bump @ both ends. Spalling, deteriorating concrete south end of deck east side - See Photo. Spall areas in post tension areas both ends of deck, see photos. Tree growth near abutments. Both south end barrier curbs settling and moving away 2 - 3" at the top. 5/2017 - Channel bank erosion near SW wing where pipe enters the channel. Sediment build up west side pier #3, approximately 4'. - 5/14/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GRAF02

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Grand Forks District	22 Owner	City/Municipal Hwy Agenc
03 County	Walsh	26 Functional	Urban, Minor Arterial
04 City	GRAFTON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 6 Business 08529 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5TH ST.EAST GRAFTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 25' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 23' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 619068.9 5363894.8		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 2006 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 975 30 Year of ADT 2013		71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	May 01, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	22.97 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	AC-SU-BRU-TEU-6-985(035)032
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
DOUBLE, 11'X 8'X 52' RCB			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GRAF02

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	104	100	104	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: New structure in 2006. 30" CMP enters the channel near the northeast wing. Culvert marker missing at the SW corner.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GRAF03

200 System Designation	4 - Urban	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	47.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Grand Forks District	22 Owner	City/Municipal Hwy Agenc
03 County	Walsh	26 Functional	Urban, Local
04 City	GRAFTON CITY	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 6 Business 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PARK RIVER	102 Direction of Traffic	2 2-way traffic
09 Location BURGAMOTT AVE SO-GRAFTON		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 25' 27.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	97d 24' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 618291.6 5364689.1		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	—	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type 1 Concrete-Cast-in-Place		64 Oper. Rating HS 22	39 Tons
108 Wearing Surface 1 Monolithic Concrete		65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating HS 11	21 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden 1	None	209 Posted in "Tons"	08 Tons
Age and Service		Appraisal	
27 Yr Built 1925 106 Yr Reconstructed		67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT 20 30 Year of ADT 2019		72 App. Rdwy. Alignment	3 Intolerable - Correct
109 Average Daily Truck Traffic	5.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	1 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 17, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical Y 24	10/17/2019
35 Structure Flared	0 No flare	Underwater N	
47 Total Horizontal Clearance	19.4 Ft.	Other Special N	
48 Length of Max Span	68 Ft.	218 Channel Profile 1 48	04/20/2017
49 Structure Length	70.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	19.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Fischer
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: GRAF03

Structure Number: GRAF03

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,453	30	433	5	70	65	950	0	0
1090/1:Exposed Rebar	sq.ft	50	0	0	0	0	100	50	0	0
Notes:areas of rusting, exposed rebar underside of deck. - 10/17/2019										
1120/1:Efflorescence/Rust Staining	sq.ft	10	100	10	0	0	0	0	0	0
Notes:underside of deck, minor areas. - 10/17/2019										
1130/1:Cracking (RC and Other)	sq.ft	70	0	0	100	70	0	0	0	0
Notes:underside of deck, various areas - 10/17/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	900	0	0	0	0	100	900	0	0
Notes:Numerous areas of deteriorating concrete with exposed aggregate on the deck surface - see FileNet photos. - 10/17/2019										
113/2:Steel Stringer	ft	476	0	0	90	426	11	50	0	0
1000/2:Corrosion	ft	476	0	0	90	426	11	50	0	0
Notes:surface rust to all stringers - see photos. - 10/17/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	0	0	100	100
Notes:no protection of the underlying metal. - 10/17/2019										
120/2:Steel Truss	ft	141	87	123	0	0	9	12	4	6
1020/2:Connection	ft	6	0	0	0	0	0	0	100	6
Notes:ice impact damage to the north side vertical truss braces. - 10/17/2019										
1900/2:Distortion	ft	12	0	0	0	0	100	12	0	0
Notes:Bent D-D section from L4' to L0' west side. - 10/17/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	70	70	30	30
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	70	70	30	30
Notes:Approximately 30% of the truss rusting to bare metal. - 10/17/2019										
152/2:Steel Floor Beam	ft	89	0	0	0	0	90	80	10	9
1000/2:Corrosion	ft	80	0	0	0	0	100	80	0	0
Notes:All floor beams rusting to bare metal. - 10/17/2019										
1900/2:Distortion	ft	9	0	0	0	0	0	0	100	9
Notes:North end of floor beams distorted from ice impact damage. - 10/17/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	50	50	50	50
3440/2:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	50	50	50	50
Notes:Rusting to bare metal all floor beams throughout entire length. - 10/17/2019										
215/3:Re Conc Abutment	ft	50	0	0	0	0	92	46	8	4
1080/3:Delamination/Spall/Patched Area	ft	20	0	0	0	0	100	20	0	0
Notes:southeast corner of the south abutment and water line and below at the north abutment. - 10/17/2019										
1130/3:Cracking (RC and Other)	ft	14	0	0	0	0	71	10	29	4
Notes:Both abutments, worse at the south abutment, see photos. - 10/17/2019										
1190/3:Abrasion(PSC/RC)	ft	16	0	0	0	0	100	16	0	0
Notes:Lower portion, north abutment below the water line. Up to 2" of section loss. - 10/17/2019										
330/1:Metal Bridge Railing	ft	141	29	41	28	40	43	60	0	0

Structure Number: GRAF03

1900/1:Distortion	ft	70	0	0	57	40	43	30	0	0
Notes:Vehicle damage to both sides. - 10/17/2019										
7000/1:Damage	ft	30	0	0	0	0	100	30	0	0
Notes:vehicle damage to both railings - 10/17/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
331/1:Re Conc Bridge Railing	ft	141	89	125	7	10	4	6	0	0
1080/1:Delamination/Spall/Patched Area	ft	6	0	0	0	0	100	6	0	0
Notes:section missing west side - see photo - 10/17/2019										
1130/1:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:minor cracking throughout entire length. - 10/17/2019										
7357/1:Pack Rust	each	1	100	1	0	0	0	0	0	0
Notes:upper truss connection plates. - 10/17/2019										
7362/2:Superstructure Traffic Impact	each	1	0	0	100	1	0	0	0	0
Notes:Ice impact damage to the west side vertical truss braces. - 10/17/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Cracking, spalling and concrete deterioration with exposed and rusting rebar with 1" section loss underside of deck. Ice damage to outside braces west side. Vehicle damage to both railings. Vertical truss member northeast corner bent. Poor vertical and horizontal roadway alignment. Inside area of upper truss area repainted. Severe channel bank erosion both banks both sides. Bank erosion up & downstream by wings. Abutment cracks extend thru below water line. Structure posted 8 tons both ends. No additional equipment used for the fracture critical inspection. - 10/17/2019

Alert Code 2: Large u-shaped cracks in both abutments at the cold joints, south open to one half (1/2") inch and north open to 3/8". West outside verticals bent at floor beam connections. Large spall SE corner south abutment with up to 5" section loss. Up to 2" of section loss at waterline and below at the north abutment. Bent D-D section L4' to L0' west side. Severe concrete deterioration top of deck. - 10/17/2019

Structure Number: 51-101-07.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	80.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Major Collector
04 City	ELMDALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05101 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH OF NIOBE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.800	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 42' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 12' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	263646.1 5399455.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	5 Moderate Damage
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1940 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	160 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	May 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.2 Ft.	Underwater	N
48 Length of Max Span	9 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	Y
51 Bridge Rdwy Width - Curb to Curb	30.5 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Lawson, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 9X9X32' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-101-07.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	95	45	43	53	50	2	2	0	0
1080/2:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
1130/2:Cracking (RC and Other)	ft	50	0	0	100	50	0	0	0	0
Notes:Minor cracking and minor to moderate spalling of concrete surfaces. - 5/3/2019										
8401/2:Wings	each	4	0	0	100	4	0	0	0	0
1900/2:Distortion	each	4	0	0	100	4	0	0	0	0
Notes:5-3-19:Wings repaired back to near plumb and held in place by 1/2" steel plate brackets. - 5/3/2019										

Remarks: Concrete moderately deteriorated along cold joint in north wall of north barrel. Concrete at lower west end of both dividing walls is deteriorating. 2 small spalls on abutment wear it meets NW wing. 0.07" cracking in both parapets. Rip rap added for erosion protection. End markers are up. - 5/3/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-101-09.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	85.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	ELMDALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF NIOBE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 40' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 12' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	263503.0 5396033.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 31 56 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 13 24 Tons
208 Dk Overburden	211 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1974 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	May 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	25 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 07/06/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	27.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	27.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lawson, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-101-09.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	226	100	226	0	0	0	0	0	0
206/1:Timber Column	each	14	100	14	0	0	0	0	0	0
216/1:Timber Abutment	ft	66	0	0	100	66	0	0	0	0
Notes:Soundings indicate small voids back of both abutment. - 5/3/2019										
1150/1:Check/Shake	ft	66	0	0	100	66	0	0	0	0
235/1:Timber Pier Cap	ft	66	100	66	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Small washouts at ends of wings on west side of structure. - 5/3/2019										

Remarks: Small yellow end markers in place. Spacer block in NW corner is dry rotted on top of the abutment cap. - 5/3/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-102-08.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	84.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	ELMDALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 1 SOUTH NIOBE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 40' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 11' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	264681.5 5396449.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 30 55 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 33 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 03, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 06/07/2017
49 Structure Length	32.15 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	09/18/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lawson, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 51-102-08.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	256	88	226	12	30	0	0	0	0
1090/1:Exposed Rebar	ft	30	0	0	100	30	0	0	0	0
Notes:South outside channel beam has spall full length of member. Short section of rebar exposed with some loss of section. - 5/3/2019										
1130/1:Cracking (RC and Other)	ft	226	100	226	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	52	85	44	15	8	0	0	0	0
1090/1:Exposed Rebar	ft	8	0	0	100	8	0	0	0	0
Notes:Precast concrete abutment piling deteriorating with small areas of rebar exposed. - 5/3/2019										
330/1:Metal Bridge Railing	ft	66	0	0	100	66	0	0	0	0
1000/1:Corrosion	ft	66	0	0	100	66	0	0	0	0
Notes:Surface rusted - 5/3/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
331/1:Re Conc Bridge Railing	ft	66	0	0	91	60	9	6	0	0
1130/1:Cracking (RC and Other)	ft	6	0	0	0	0	100	6	0	0
Notes:6' horizontal crack in back of SW curb. - 5/3/2019										
1190/1:Abrasion(PSC/RC)	ft	60	0	0	100	60	0	0	0	0
Notes:Face of curbing abraded. - 5/3/2019										
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Shallow scour hole (30'x24'x1.5') under bridge. Silt deposit partially obstructs channel south of bridge; channel to the north choked with cat-tails. 2' of back of SE wing wall exposed from scour. - 5/3/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1900/1:Distortion	each	4	0	0	100	4	0	0	0	0
Notes:Vertical, precast concrete panels for NW and NE wings are separating at ground level & bottom pushed inward. - 5/3/2019										

Remarks: Spall developing on outside of curb near SW corner. Small horizontal hole behind NE wing wall. Small yellow end markers in place. - 5/3/2019

Alert Code 1: Vertical, precast concrete panels for NW and NE wings are separating at ground level & bottom pushed inward. - 5/3/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-105-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	DENMARK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	STONY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 7 NORTH NIOBE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 47' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 09' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	268511.1 5409531.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden		70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2014 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	3.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	40.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	10/01/2014
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0051(021)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Lawson, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE 12 x 8 x 132 RCB SINGLE 14 X 8 X 132		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-105-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	396	100	396	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Uneven joints of 1". - 5/3/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-105-13.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	87.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Major Collector
04 City	SPENCER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	1 On Interstate STRAHNET
4 County Hwy 1 Mainline	05105 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 SOUTH KENASTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	4.099	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 36' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 07' 31.00"	112 NBIS Bridge Length	No
GPS Coordinates XY	269631.2 5388253.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	-2	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	0 Other	Load Rating and Posting	
	00 Other (NBI)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1977 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	260 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	May 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.9 Ft.	Underwater	N
48 Length of Max Span	6 Ft.	Other Special	N
49 Structure Length	5.91 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	Y
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1900
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Lawson, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
SINGLE, 6X123-6 RCP		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-105-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	125	79	99	0	0	21	26	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	0	0	100	1	0	0
Notes:1'x1' spall at top of second barrel section from west.Mesh is exposed. - 5/3/2019										
1900/1:Distortion	ft	25	0	0	0	0	100	25	0	0
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:10' x 20' x 2' scour hole at outlet end. - 5/3/2019										

Remarks: Several barrel sections have separated one to two inches, there is still contact between the tongue and groove fittings. - 5/3/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-106-08.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	76.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Major Collector
04 City	ELMDALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	1 On Interstate STRAHNET
4 County Hwy 1 Mainline	05110 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 NORTH KENMARE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	4.999	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 41' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 06' 16.00"	112 NBIS Bridge Length	No
GPS Coordinates XY	271520.0 5396928.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	-2	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	5 Moderate Damage
44 Approach Struct Type	0 Other	Load Rating and Posting	
	00 Other (NBI)	31 Design Load	
45 No. Spans in Main Unit	2	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1950 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	300 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	17 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	May 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	34.4 Ft.	Underwater	N
48 Length of Max Span	7 Ft.	Other Special	N
49 Structure Length	15.09 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	Y
51 Bridge Rdwy Width - Curb to Curb	34.8 Ft.	212 Structure Load Rated	01/01/1900
52 Deck Width	36.1 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Lawson, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
DOUBLE, 7X7X36' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-106-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	72	96	69	0	0	4	3	0	0
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	0	0	100	3	0	0
Notes:3' spall in SE corner of parapet, SPALL HAS EXPOSED RE- BAR THAT CONNECT WINGWALLS TO MAIN STRUCTURE. EXPOSED REBAR HAS LOST NEARLY HALF ITS SECTION. - 5/3/2019										
1190/1:Abrasion(PSC/RC)	ft	71	100	71	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
Notes:LARGE SCOUR HOLE AT OUTLET HAS PARTIALLY EX- POSED SOUTH WING FOOTINGS - 5/3/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: MINOR DIAGONAL CRACKS IN ALL WINGS AND SOUTH PARAPET. .SMALL YELLOW END MARKERS IN SW corner. 1' x 3' sinkhole in SW corner behind wing. - 5/3/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-106-13.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	55.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	SPENCER TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 1 SOUTH KENASTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 36' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 06' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	271289.2 5389384.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 13 24 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 8 16 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	21 Tons
Age and Service		Appraisal	
27 Yr Built	1957 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 03, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 07/06/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lawson, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 51-106-13.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	581	0	0	99	577	1	4	0	0
1150/1:Check/Shake	sq.ft	581	0	0	99	577	1	4	0	0
Notes:Planks in south half of deck are severely weathered with minor to moderate cracking. - 5/3/2019										
111/1:Timber Open Girder	ft	427	0	0	100	427	0	0	0	0
1150/1:Check/Shake	ft	327	0	0	100	327	0	0	0	0
1160/1:Crack (Timber)	ft	100	0	0	100	100	0	0	0	0
Notes:From the west; girders 9, 13, & 14, 15, 16 have longitudinal cracks. - 5/3/2019										
206/1:Timber Column	each	10	0	0	100	10	0	0	0	0
1150/1:Check/Shake	each	10	0	0	100	10	0	0	0	0
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1900/1:Distortion	ft	48	0	0	100	48	0	0	0	0
Notes:Tops of abutments are buckling. Abutment caps are tipped, slightly. Wood diaphragms at mid span are pulling loose from the girders. - 5/3/2019										
6000/1:Scour	ft	1	0	0	100	1	0	0	0	0
Notes:Scour exposing bottom of south abutment. - 5/3/2019										
235/1:Timber Pier Cap	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
332/1:Timb Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8401/1:Wings	each	4	0	0	75	3	25	1	0	0
1900/1:Distortion	each	4	0	0	75	3	25	1	0	0
Notes:SE wing twisted, planks are bulged. - 5/3/2019										

Remarks: Large silt deposit at east edge of bridge. Channel to west choked with brush. All wing walls are ripped. 2' of bottom of SW wing exposed where it meets abutment 2. End markers are down. - 5/3/2019 South load limit sign in place but illegible. -5/3/2019 Posted for load 9-7-19 per LG nmh 10-10-19

Alert Code 1: Girders 11 and 12 are cracked diagonally 3/4th their height; a new girder has been set beside them. - 5/3/2019

Critical FindingSouth load limit sign in place but illegible. -5/3/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-107-08.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Major Collector
04 City	ELMDALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05105 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DES LACS REFUGE LAKE	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST OF KENMARE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.999	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 40' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 05' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	272116.6 5396049.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 25 47 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	260 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	13.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	11 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	May 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	46.92 Ft.	218 Channel Profile	1 48 07/06/2017
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	31.5 Ft.	213 Federal Aid Project Number	CBRS-5105(52)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Lawson, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 51-107-08.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,410	100	1,410	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	187	100	187	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	95	96	91	4	4	0	0	0	0
1090/1:Exposed Rebar	ft	4	0	0	100	4	0	0	0	0
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
8398/1:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: There are diagonal 0.30 mm cracks in NE and NW corners of abutments where they tie to wingwalls. Concrete aprons have been poured along lower portion of both abutments. This covers deteriorating concrete and provides scour protection to base of abutments. Sheet piling spur dikes and grouted rock spillway were constructed in summer of 2007. T-E stress = 395 Allow = 424 - 5/3/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-107-08.2

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Major Collector
04 City	KENMARE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05105 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DES LACS REFUGE LAKE	102 Direction of Traffic	2 2-way traffic
09 Location	CITY OF KENMARE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	9.498	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 40' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 05' 37.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	272287.1 5396100.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 33 60 Tons
208 Dk Overburden	33 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	320 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	22 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	32.0 Ft.	Underwater	N
48 Length of Max Span	80 Ft.	Other Special	N
49 Structure Length	80.00 Ft.	218 Channel Profile	1 48 07/06/2017
50 Curb/Sidewalk Widths	1.8 Ft Rt-Side	Chaining Date	None
	9.8 Ft Lt-Side	207 Transporter Erector Routes and Sites	Y
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	08/22/2018
	26.0 Ft.	213 Federal Aid Project Number	ND FLAP CR2(1)
52 Deck Width	39.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lawson, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Not Applicable (P)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-107-08.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	1,040	100	1,040	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	79	100	79	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	160	100	160	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: STRUCTURE REPLACED IN 2016. 2.5 to 3" asphalt overlays the box beams. - 5/3/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-107-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	69.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	BADEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST OF KENASTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 37' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 06' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	271430.2 5389709.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 32 57 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	29 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1950 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	55 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.2 Ft.	Underwater	N
48 Length of Max Span	24 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 07/06/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	09/18/2017
	27.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lawson, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 51-107-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	226	100	226	0	0	0	0	0	0
206/1:Timber Column	each	14	0	0	93	13	7	1	0	0
1150/1:Check/Shake	each	13	0	0	100	13	0	0	0	0
1160/1:Crack (Timber)	each	1	0	0	0	0	100	1	0	0
Notes:Abutment piling bowed inward from weight of approach embankments. 2 ft. Long crack at top of first pile in SE corner. Two foot vertical crack at center of first pile in NE corner. Piling also cracked horizontally at same location. First piling, at north end of east abutment, partially ruptured near ground level. - 5/3/2019										
216/1:Timber Abutment	ft	59	0	0	100	59	0	0	0	0
1900/1:Distortion	ft	58	0	0	100	58	0	0	0	0
Notes:East abutment pushed inward 11.5" in NE corner. There are dead-man anchors attached to tops of some of piling. - 5/3/2019										
6000/1:Scour	ft	1	0	0	100	1	0	0	0	0
Notes:Channel scour has partially exposed bottom of east abutment. Planks nailed to piling, to protect it from scour, torn partially loose. 3 foot deep scour hole under bridge. Some channel scour upstream from bridge. - 5/3/2019										
235/1:Timber Pier Cap	ft	66	50	33	50	33	0	0	0	0
1150/1:Check/Shake	ft	66	50	33	50	33	0	0	0	0
Notes:Moderate weather checking in east abutment cap. - 5/3/2019										
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	49	98	48	0	0	2	1	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	0	0	100	1	0	0
Notes:First concrete bridge rail post in SE corner is spalled with rebar exposed. - 5/3/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1150/1:Check/Shake	each	4	0	0	100	4	0	0	0	0

Remarks: Moderate erosion at outer corners of all wingwalls. Moderate erosion behind outer half of SW wing. End markers are up. - 5/3/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-111-14.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	BADEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 2 SOUTH KENASTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 35' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 00' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	278469.7 5386196.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 29 53 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
208 Dk Overburden	22 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1961 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	45 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	7 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	May 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 07/01/2019
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	09/18/2017
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lawson, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 51-111-14.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	770	100	770	0	0	0	0	0	0
16/1:Re Conc Top Flange	sq.ft	770	100	770	0	0	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	249	83	207	0	0	17	42	0	0
1090/1:Exposed Rebar	ft	7	0	0	0	0	100	7	0	0
Notes:Two of beams, of concrete channel beams have spalls developing. One short section of rebar exposed with some loss of section. - 5/3/2019										
1130/1:Cracking (RC and Other)	ft	35	0	0	0	0	100	35	0	0
215/1:Re Conc Abutment	ft	52	77	40	23	12	0	0	0	0
1130/1:Cracking (RC and Other)	ft	12	0	0	100	12	0	0	0	0
331/1:Re Conc Bridge Railing	ft	62	95	59	0	0	5	3	0	0
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	0	0	100	3	0	0
Notes:Concrete curb chipped near SE end of bridge. Rebar exposed. - 5/3/2019										
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Scour has exposed floor cutoff wall in NW, SW, & SE corners. - 5/3/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Channel both directions from bridge choked with brush. Silt build up approx. two feet deep blocks most of both openings under bridge. No bridge rails. Deck edge marked with concrete curbs. SW wing wall has 2 minor spalls. End marker down in NW corner. 5-3-19: Concrete floor has severe cracking 1' out from both abutments. The 770 sq.ft. of cracking that was deleted is in the floor not the deck. - 5/3/2019

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SEC 409

Structure Number: 51-113-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	83.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	GREENBUSH TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DES LACS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 3 NORTH DONNYBROOK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 33' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 57' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	281519.5 5382732.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 30 55 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 33 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	10 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 03, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	1 48 07/06/2017
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	09/18/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lawson, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 51-113-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	249	79	197	21	52	0	0	0	0
1090/1:Exposed Rebar	ft	12	0	0	100	12	0	0	0	0
Notes:There are several areas of spalled concrete along bottom of channel beams. Some of spalled areas have 1-3' long sections of rebar exposed and rusting. Some with minor section loss. - 5/3/2019										
1130/1:Cracking (RC and Other)	ft	40	0	0	100	40	0	0	0	0
215/1:Re Conc Abutment	ft	52	0	0	96	50	4	2	0	0
Notes:Minor cracking and some spalling of precast abutments. Concrete abutment caps have moderate random cracks. - 5/3/2019										
1090/1:Exposed Rebar	ft	2	0	0	0	0	100	2	0	0
1190/1:Abrasion(PSC/RC)	ft	50	0	0	100	50	0	0	0	0
Notes:Cap in north abutment deteriorating under each concrete channel beam. - 5/3/2019										
331/1:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1130/1:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:Diagonal crack at outer end of SW wingwall with a 1 ft. Sq. area where the concrete has spalled. - 5/3/2019										

Remarks: Tops of all wingwalls are beginning to scale. Minor to moderate erosion at outer ends of SW and SE wing walls. Minor lateral movement of channel adjacent to SW wing. End markers down in NE and SW corners. - 5/3/2019

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SEC 409

Structure Number: 51-114-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	77.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	CARBONDALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DES LACS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 3 NORTH DONNYBROOK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 32' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 55' 49.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	283733.9 5380574.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	3 Open Grating	64 Oper. Rating	HS 44 79 Tons
108 Wearing Surface	9 Other	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 22 40 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1947 106 Yr Reconstructed	2001	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT	2019	4 Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	10 Ft.	90 Date of Last Inspection	May 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	19.7 Ft.	Underwater	N
48 Length of Max Span	36 Ft.	Other Special	N
49 Structure Length	37.07 Ft.	218 Channel Profile	1 48 07/06/2017
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	20.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	22.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Lawson, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Structure Number: 51-114-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
28/1:Steel Deck - Open Grid	sq.ft	818	0	0	100	815	0	3	0	0
1000/1:Corrosion	sq.ft	815	0	0	100	815	0	0	0	0
Notes:Surface rusted - 5/3/2019										
7000/1:Damage	sq.ft	3	0	0	0	0	100	3	0	0
Notes:Hole tore in metal grating. Both ends of open grate deck have small, surface tears caused by traffic. - 5/3/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	262	100	262	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	200	50	100	0	0	50	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
206/1:Timber Column	each	12	0	0	0	0	92	11	8	1
1140/1:Decay/Section Loss	each	12	0	0	0	0	92	11	8	1
Notes:2nd pile from the East in South abut. broke in two at ground line. All piling severely weather checked and decayed. - 5/3/2019										
216/1:Timber Abutment	ft	36	0	0	100	36	0	0	0	0
1150/1:Check/Shake	ft	36	0	0	100	36	0	0	0	0
Notes:Timber elements weathered - 5/3/2019										
235/1:Timber Pier Cap	ft	36	0	0	100	36	0	0	0	0
1150/1:Check/Shake	ft	36	0	0	100	36	0	0	0	0
Notes:Timber elements weathered - 5/3/2019										
332/1:Timb Bridge Railing	ft	75	0	0	75	56	25	19	0	0
1150/1:Check/Shake	ft	56	0	0	100	56	0	0	0	0
Notes:Timber elements weathered - 5/3/2019										
7000/1:Damage	ft	19	0	0	0	0	100	19	0	0
Notes:SE timber curb split in two the entire length. - 5/3/2019										
8401/1:Wings	each	4	0	0	50	2	50	2	0	0
1140/1:Decay/Section Loss	each	4	0	0	50	2	50	2	0	0
Notes:Piling in NE and SW wing severely decayed - 5/3/2019										

Remarks: Bottom inner corners of wings, where attached to abutments, are exposed by channel degradation. - 5/3/2019**Alert Code 2:** Piling in NE and SW wing severely decayed. All piling severely weather checked and decayed. - 5/3/2019

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SEC 409

Structure Number: 51-117-20.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	75.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Major Collector
04 City	DONNYBROOK CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05115 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DES LACS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	CITY OF DONNYBROOK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	6.999	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 30' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 52' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	287165.1 5377288.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 29 53 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
208 Dk Overburden	32 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1960 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	130 30 Year of ADT 2019	71 Waterway Adequacy	5 Above Tolerable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 03, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	30 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 07/05/2017
50 Curb/Sidewalk Widths	3.3 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	Y
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	09/18/2017
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	28.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lawson, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 51-117-20.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	743	100	743	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	743	98	731	2	12	0	0	0	0
Notes:5-3-19: Asphalt overlay delaminating 3x4' - 5/3/2019										
110/1:Re Conc Opn Girder/Beam	ft	279	0	0	79	219	22	60	0	0
1090/1:Exposed Rebar	ft	60	0	0	0	0	100	60	0	0
Notes:-Several spalls along bottom of channel beams. Exposed rebar has minor to moderate section loss. - 5/3/2019										
1130/1:Cracking (RC and Other)	ft	219	0	0	100	219	0	0	0	0
215/1:Re Conc Abutment	ft	59	90	53	9	5	2	1	0	0
1080/1:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
Notes:-There are random cracks in both concrete abutment caps, mostly under where the channel beams bear. - 5/3/2019										
1090/1:Exposed Rebar	ft	1	0	0	0	0	100	1	0	0
330/1:Metal Bridge Railing	ft	62	100	62	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	62	97	60	0	0	3	2	0	0
1090/1:Exposed Rebar	ft	2	0	0	0	0	100	2	0	0
Notes:-Large chip with exposed rebar at south end of east curb. - 5/3/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
Notes:2' Erosion starting behind NW wing. Small washouts back of NW and NE wing walls. - 5/3/2019										
1130/1:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:-There is a vertical crack in the concrete cap on the NW wing wall; also a large crack in the concrete cap for the NE wing wall. - 5/3/2019										

Remarks: -Bottom of concrete rail posts beginning to spall with some rebar exposed. -1' x 1' spall on the back side of SW wing next to the deck. -Moderate deterioration to base of concrete abutment plank in NW corner. -All end markers up. -T-E stress = 27774 Allow = 28000 10/17/2011 - Large scour hole around SW wingwall. - 5/3/2019

Alert Code 1: -Moderate, lateral movement of channel bank adjacent to SW wing. - 5/3/2019

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SEC 409

Structure Number: 51-117-20.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	59.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	DONNYBROOK CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DES LACS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	CITY OF DONNYBROOK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 30' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 52' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	287415.0 5376994.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 10 18 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 6 12 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	18 Tons
Age and Service		Appraisal	
27 Yr Built	1967 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	4 Tolerable
29 ADT	80 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 03, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	19 Ft.	218 Channel Profile	1 48 07/05/2017
49 Structure Length	51.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lawson, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-117-20.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,216	8	96	92	1,120	0	0	0	0
1150/1:Check/Shake	sq.ft	1,216	8	96	92	1,120	0	0	0	0
Notes:Several deck planks have longitudinal cracks and or minor to moderate wear. - 5/3/2019										
111/1:Timber Open Girder	ft	988	0	0	100	988	0	0	0	0
1150/1:Check/Shake	ft	988	0	0	100	988	0	0	0	0
Notes:5-3-19: There are minor longitudinal weather checking cracks (from south) in the following; span one girders 6, 8, 13, and 16. Span two girders 2, 5, 6, 10, and 11. Span three girders 4, 5, 7, 13, 17, and 18. - 5/3/2019										
206/1:Timber Column	each	20	0	0	100	20	0	0	0	0
1150/1:Check/Shake	each	20	0	0	100	20	0	0	0	0
Notes:Timber elements weathered - 5/3/2019										
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
Notes:Abutment one cap has 7' long by 4" deep crack starting at north end. - 5/3/2019										
235/1:Timber Pier Cap	ft	108	0	0	100	108	0	0	0	0
1150/1:Check/Shake	ft	108	0	0	100	108	0	0	0	0
Notes:Cap on pier three has 6 ft. Long crack toward south end. - 5/3/2019										
332/1:Timb Bridge Railing	ft	105	0	0	100	105	0	0	0	0
1150/1:Check/Shake	ft	105	0	0	100	105	0	0	0	0
Notes:Timber elements weathered - 5/3/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1140/1:Decay/Section Loss	each	4	0	0	100	4	0	0	0	0
Notes:Dry rot in top of all wing pile. - 5/3/2019										

Remarks: Sway braces for both piers are cracked. Moderate erosion at outer ends of all wingwalls. Cable anchorson piles 1, 2, & 3 from south in east abutment broke. - 5/3/2019 8/15/2019 - Load Posting signs installed Aug 15th, 2019. cta

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-125-24.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Major Collector
04 City	CARPIO CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05126 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DES LACS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	CITY OF CARPIO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	9.198	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 26' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 42' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	299462.0 5369305.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 53 96 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 29 54 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2010 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	8 Desirable Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	360 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	8.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	35.8 Ft.	Underwater	N
48 Length of Max Span	50 Ft.	Other Special	N
49 Structure Length	100.07 Ft.	218 Channel Profile	1 48 06/27/2017
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	1.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	Y
51 Bridge Rdwy Width - Curb to Curb	36.1 Ft.	212 Structure Load Rated	11/28/2011
52 Deck Width	38.1 Ft.	213 Federal Aid Project Number	ROM-0300(100)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-125-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,825	48	1,825	52	2,000	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Cracking at bridge ends. - 9/19/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	1,900	0	0	100	1,900	0	0	0	0
Notes:Light abrasion on approx. 50% of the deck - 9/19/2019										
520/1:Conc Re Prot Sys	sq.ft	3,825	100	3,825	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	38	100	38	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	82	100	82	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	200	100	200	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor transverse, hairline cracks in deck surface. - 9/19/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-127-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	MAYLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DES LACS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 1 SOUTH CARPIO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 25' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 40' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	302703.4 5367537.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 25 46 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 12 22 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1946 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	18 Ft.	90 Date of Last Inspection	September 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.3 Ft.	Underwater	N
48 Length of Max Span	44 Ft.	Other Special	N
49 Structure Length	44.95 Ft.	218 Channel Profile	1 48 06/28/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	27.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-127-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	404	100	404	0	0	0	0	0	0
206/1:Timber Column	each	16	100	16	0	0	0	0	0	0
216/1:Timber Abutment	ft	59	85	50	15	9	0	0	0	0
1170/1:Split/Delamination (Timber)	ft	9	0	0	100	9	0	0	0	0
Notes:Abutment back plank near lower SE corner is split diagonally; also moderately decayed. - 9/19/2019										
235/1:Timber Pier Cap	ft	59	100	59	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	89	100	89	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	89	100	89	0	0	0	0	0	0
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Channel upstream from bridge, approx.40' makes a sharp 90 degree turn. Remains of old timber abutment in place at NE corner of bridge. - 9/19/2019										
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1180/1:Abrasion	each	1	0	0	100	1	0	0	0	0
Notes:-Top end of wingwall in NW corner scuffed from debris collision. - 9/19/2019										

Remarks: West half of channel silted in. - 9/19/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-128-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	25.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	MAYLAND TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DES LACS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 2 SOUTH CARPIO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 24' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 38' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	304166.6 5365884.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	4	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 0 0 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 0 0 Tons
Dk Protect	None	70 Bridge Posting	2 20.0-29.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	27 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	0 Closed
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 19, 2019
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.4 Ft.	Other Special	N
48 Length of Max Span	18 Ft.	218 Channel Profile	N
49 Structure Length	65.94 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-128-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,152	0	0	0	0	100	1,152	0	0
1180/1:Abrasion	sq.ft	1,152	0	0	0	0	100	1,152	0	0
Notes:Weathered and cracked. - 9/19/2019										
111/1:Timber Open Girder	ft	860	0	0	100	860	0	0	0	0
1150/1:Check/Shake	ft	860	0	0	100	860	0	0	0	0
Notes:Weathered timber - 9/19/2019										
206/1:Timber Column	each	24	0	0	96	23	4	1	0	0
1150/1:Check/Shake	each	23	0	0	100	23	0	0	0	0
Notes:Weathered timber - 9/19/2019										
1160/1:Crack (Timber)	each	1	0	0	0	0	100	1	0	0
216/1:Timber Abutment	ft	39	0	0	100	39	0	0	0	0
1150/1:Check/Shake	ft	39	0	0	100	39	0	0	0	0
Notes:Weathered timber - 9/19/2019										
235/1:Timber Pier Cap	ft	95	0	0	96	91	4	4	0	0
1140/1:Decay/Section Loss	ft	4	0	0	0	0	100	4	0	0
1150/1:Check/Shake	ft	91	0	0	100	91	0	0	0	0
Notes:Weathered timber - 9/19/2019										
332/1:Timb Bridge Railing	ft	132	0	0	50	66	0	0	50	66
1150/1:Check/Shake	ft	66	0	0	100	66	0	0	0	0
Notes:Weathered timber - 9/19/2019										
7000/1:Damage	ft	66	0	0	0	0	0	0	100	66
Notes:West rail missing - 9/19/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1150/1:Check/Shake	each	4	0	0	100	4	0	0	0	0
Notes:Weathered timber - 9/19/2019										

Remarks: Closed since summer of 2008. Barricades are in place on existing structure. - 9/19/2019**Alert Code 1:** Structure is still in place. Public uses a structure installed by Gravel Products to cross channel. - 9/19/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-129-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	58.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	MAYLAND TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DES LACS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 3 SOUTH CARPIO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 24' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 37' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	306074.7 5364287.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 26 47 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 15 29 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1930 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 19, 2019
32 Approach Roadway Width	15 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	45.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	20.0 Ft.	Other Special	N
48 Length of Max Span	33 Ft.	218 Channel Profile	1 48 06/28/2017
49 Structure Length	35.10 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	20.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	21.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-129-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	700	0	0	0	0	100	700	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	700	0	0	0	0	100	700	0	0
Notes:Bridge deck severely scaled with up to 1"+ of delamination, with several longitudinal cracks. Two of these cracks nearly full length of deck. They also show up as hairline cracks on underside of deck. - 9/19/2019										
107/1:Steel Opn Girder/Beam	ft	279	0	0	100	279	0	0	0	0
1000/1:Corrosion	ft	279	0	0	100	279	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3410/1:Chalk(Steel Protect Coatings)	sq.ft	100	0	0	0	0	100	100	0	0
215/1:Re Conc Abutment	ft	43	0	0	0	0	100	43	0	0
Notes:Large vertical crack at bridge seat, 1 and 3/4 inches wide and extends downward to where wingwall and abutment tie together in NW corner. - 9/19/2019										
1190/1:Abrasion(PSC/RC)	ft	43	0	0	0	0	100	43	0	0
Notes:Concrete deteriorating below high water line, with rebar exposed in both abutment. - 9/19/2019										
331/1:Re Conc Bridge Railing	ft	69	23	16	48	33	29	20	0	0
1080/1:Delamination/Spall/Patched Area	ft	33	0	0	100	33	0	0	0	0
1090/1:Exposed Rebar	ft	20	0	0	0	0	100	20	0	0
Notes:-Longitudinal crack in east curb runs nearly full length of bridge with rebar exposed on half of it. - 9/19/2019										
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Channel bank is sloughing at outer end of SW wingwall. Poor channel alignment. - 9/19/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1190/1:Abrasion(PSC/RC)	each	4	0	0	100	4	0	0	0	0
Notes:Abrasion at and below water line. - 9/19/2019										

Remarks: Wood retaining wall at NW corner of north abutment. -North abutment pushed toward channel 6" in NW corner and 6" in NE corner but remains plumb. -End markers down. - 9/19/2019

Alert Code 1: Washout back of NE wing & back of SW wing 5'. - 9/19/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-130-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	73.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	MAYLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DES LACS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 NORTH FOXHOLM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 22' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 34' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	308799.9 5361646.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 24 43 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 9 18 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1972 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	75 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 19, 2019
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	54 Ft.	218 Channel Profile	1 48 06/28/2017
49 Structure Length	55.12 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-130-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	551	0	0	90	496	10	55	0	0
1110/1:Cracking (PSC)	ft	551	0	0	90	496	10	55	0	0
Notes:#2 - Random longitudinal hairline cracks in deck surface. #3 - Long crack the length of all girders on top. Center girder is greater than .05" crack. Grout, in seams between box beams is deteriorating. Grout also spalling of top of east beam; near mid-span. - 9/19/2019										
206/1:Timber Column	each	18	0	0	89	16	11	2	0	0
1150/1:Check/Shake	each	16	0	0	100	16	0	0	0	0
Notes:Weathered timber - 9/19/2019										
7000/1:Damage	each	2	0	0	0	0	100	2	0	0
Notes:Fourth piling, from west, in south abutment, has started to rupture around an anchor bolt. 5th piling is crushing along back side; caused by bowing from weight of embankment, south abutment - 9/19/2019										
216/1:Timber Abutment	ft	66	0	0	100	66	0	0	0	0
Notes:Spacer block on top of NE corner of abutment cap rotted. - 9/19/2019										
1900/1:Distortion	ft	66	0	0	100	66	0	0	0	0
Notes:Abutment piling beginning to bow inward from weight of approach embankments. - 9/19/2019										
235/1:Timber Pier Cap	ft	66	0	0	100	66	0	0	0	0
1150/1:Check/Shake	ft	66	0	0	100	66	0	0	0	0
330/1:Metal Bridge Railing	ft	112	100	112	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	112	100	112	0	0	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
7000/1:Damage	each	1	0	0	100	1	0	0	0	0
Notes:Wing piling being crushed from weight of embankment being exerted on deadman anchors. - 9/19/2019										

Remarks: -Moderate size wash-out behind SW wingwall. -Some of the hairline cracks in deck are seeping water (top of precast beams are deck surface) as weep holes in beams are in use. - 9/19/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-131-29.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Major Collector
04 City	FOXHOLM TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05132 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DES LACS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	CITY OF FOXHOLM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	8.198	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 22' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 34' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	309672.8 5360642.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 27 49 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 29 Tons
208 Dk Overburden	35 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1954 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	8.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	19 Ft.	90 Date of Last Inspection	September 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 06/27/2017
50 Curb/Sidewalk Widths	3.9 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	09/18/2017
	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-131-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	743	100	743	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	743	100	743	0	0	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	249	83	206	0	0	17	43	0	0
1080/1:Delamination/Spall/Patched Area	ft	40	0	0	0	0	100	40	0	0
Notes:Girders 7, 8 from W. delaminating and cracking- 40' - 9/19/2019										
1090/1:Exposed Rebar	ft	3	0	0	0	0	100	3	0	0
215/1:Re Conc Abutment	ft	59	0	0	95	56	5	3	0	0
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	0	0	100	3	0	0
Notes:Top of south abutment spalling under ends of channel beams. Small spalls starting on the bottoms of beam portion of some of the channels. - 9/19/2019										
1190/1:Abrasion(PSC/RC)	ft	56	0	0	100	56	0	0	0	0
Notes:Minor deterioration of concrete below high water line. - 9/19/2019										
330/1:Metal Bridge Railing	ft	177	100	177	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	177	0	0	99	175	1	2	0	0
1090/1:Exposed Rebar	ft	2	0	0	0	0	100	2	0	0
Notes:Curb ends broke - 9/19/2019										
1190/1:Abrasion(PSC/RC)	ft	175	0	0	100	175	0	0	0	0
Notes:Abrasion at curb - 9/19/2019										
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Upstream. See picture - 9/19/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0

Remarks: End markers are up. - 9/19/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-133-42.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Major Collector
04 City	ALDEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	1 On Interstate STRAHNET
4 County Hwy 1 Mainline	5144 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 7 WEST OF MINOT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	0000000000 00	105 Federal Lands Highways	Not applicable
16 Latitude	48d 10' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 31' 53.00"	112 NBIS Bridge Length	No
GPS Coordinates XY	311837.8 5339648.5	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	0 Other	Load Rating and Posting	
		31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 60 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	380 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	31 Ft.	90 Date of Last Inspection	April 05, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	31.0 Ft.	Underwater	N
48 Length of Max Span	7 Ft.	Other Special	N
49 Structure Length	7.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	Y
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/01/1980
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Lawson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	0.0 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
SINGLE, 7'X110' RCP		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 51-133-42.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	110	99	109	0	0	1	1	0	0
1080/2:Delamination/Spall/Patched Area	ft	1	0	0	0	0	100	1	0	0
Notes:On outlet end section - 4/5/2019										
4000/2:Settlement	ft	109	100	109	0	0	0	0	0	0

Remarks: Several barrel sections separated 2-3". No erosion as section still in contact. - 4/5/2019

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SEC 409

Structure Number: 51-134-29.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Major Collector
04 City	ST. MARYS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05132 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MOUSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST FOXHOLM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	10.998	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 22' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 30' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	314407.2 5360661.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	8 Gravel	64 Oper. Rating	HS 47 85 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 22 40 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	September 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	59 Ft.	Other Special	N
49 Structure Length	120.08 Ft.	218 Channel Profile	1 48 06/27/2017
50 Curb/Sidewalk Widths	4.9 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	37.4 Ft.	213 Federal Aid Project Number	BRS-5132(53)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 51-134-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,584	5	179	95	3,405	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	179	0	0	100	179	0	0	0	0
Notes:Minor cracks, see picture - 9/19/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	3,226	0	0	100	3,226	0	0	0	0
Notes:Deck surface lightly scaled. - 9/19/2019										
104/1:Pre Clsd Box Girder	ft	600	100	600	0	0	0	0	0	0
Notes:Longitudinal, hairline crack developing a few inches up from the bottom. on the horizontal face of several of the box beams. - 9/19/2019										
210/1:Re Conc Pier Wall	ft	39	100	39	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	75	100	75	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	239	0	0	84	200	16	39	0	0
1080/1:Delamination/Spall/Patched Area	ft	39	0	0	0	0	100	39	0	0
Notes:Moderate spalls in jersey barriers have been grouted, but are delaminated - 9/19/2019										
1130/1:Cracking (RC and Other)	ft	200	0	0	100	200	0	0	0	0
Notes:Cracking every 4-6'. See picture - 9/19/2019										
333/1:Other Bridge Railing	ft	131	100	131	0	0	0	0	0	0
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: End markers are up. - 9/19/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-134-34.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	58.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	KIRKELIE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DES LACS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 4 NORTH DES LACS	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 18' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 30' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	313833.8 5353864.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 23 41 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 13 25 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	211 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	11 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 19, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 06/28/2017
49 Structure Length	62.01 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	09/19/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 51-134-34.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	495	0	0	35	175	65	320	0	0
1090/1:Exposed Rebar	ft	120	0	0	0	0	100	120	0	0
Notes:Short to long sections of rebar exposed and rusting. Large spalls in beam portion of several of the channel beams. - 9/19/2019										
1130/1:Cracking (RC and Other)	ft	375	0	0	47	175	53	200	0	0
Notes:Several well defined hairline cracks originate in these spalled areas and run upward into deck portion of channel beams. - 9/19/2019										
202/1:Steel Column	each	5	0	0	100	5	0	0	0	0
1000/1:Corrosion	each	5	0	0	100	5	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3430/1:Ox Flm/Txt Adhr(Stl Prot Coat	sq.ft	100	0	0	100	100	0	0	0	0
206/1:Timber Column	each	30	0	0	87	26	13	4	0	0
1140/1:Decay/Section Loss	each	10	0	0	100	10	0	0	0	0
Notes:Original piling have one inch section loss from fire damage. First two piling in NE corner abutment scuffed from ice damage. - 9/19/2019										
1150/1:Check/Shake	each	16	0	0	100	16	0	0	0	0
Notes:Weathered timber - 9/19/2019										
1170/1:Split/Delamination (Timber)	each	4	0	0	0	0	100	4	0	0
Notes:Some of second set of piling have vertical splits originating at their tops. East abutment caps bearing on back half of piling, due to piles leaning in and cracking where cap sits. - 9/19/2019										
216/1:Timber Abutment	ft	52	0	0	50	26	50	26	0	0
1150/1:Check/Shake	ft	26	0	0	100	26	0	0	0	0
1900/1:Distortion	ft	26	0	0	0	0	100	26	0	0
235/1:Timber Pier Cap	ft	79	0	0	100	79	0	0	0	0
1150/1:Check/Shake	ft	79	0	0	100	79	0	0	0	0
Notes:East abutment cap has horizontal crack entire length. - 9/19/2019										
330/1:Metal Bridge Railing	ft	125	100	125	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	125	0	0	100	125	0	0	0	0
1130/1:Cracking (RC and Other)	ft	125	0	0	100	125	0	0	0	0
Notes:.80 mm longitudinal crack along top of west curb. - 9/19/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1150/1:Check/Shake	each	2	0	0	100	2	0	0	0	0
Notes:Weathered timber - 9/19/2019										
7000/1:Damage	each	2	0	0	100	2	0	0	0	0
Notes:Outer third of NW wingwall severely damaged by debris collision. First NE wing piling is broke, next piling is moderately scuffed, - 9/19/2019										

Remarks: Both abutments have double set of piling. Ice nose and plank protection have been attached to pier and abutment piling. To lessen abruptness of sharp vertical curve caused by nearby railroad crossing, gravel overburden at south end of deck has been increased to 20" and tapering down to 3" at north end. SE end marker is down. - 9/19/2019

Alert Code 1: Top two, east abutment, plank tipped back. - 9/19/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-134-34.0

Alert Code 2: East abutment partially undermined toward NE corner of bridge. Deck extends beyond abutments and approach embankment is being eroded into cavity under deck ends. - 9/19/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-136-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	68.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MOUSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 2 SOUTH FOXHOLM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 20' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 27' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	317564.6 5357188.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	4	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 30 55 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 33 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	11 Tons
Age and Service		Appraisal	
27 Yr Built	1945 106 Yr Reconstructed	1992	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT	2019	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	120.08 Ft.	218 Channel Profile	1 06/28/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	212 Structure Load Rated	09/19/2017
52 Deck Width	25.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Medler, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 51-136-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	961	0	0	77	744	23	217	0	0
1080/1:Delamination/Spall/Patched Area	ft	944	0	0	79	744	21	200	0	0
Notes:Large spalls in beam portions of several of the channel beams, several well defined hairline cracks originate in these spalled areas and run upward into deck portion of channel beams. - 10/7/2019										
1090/1:Exposed Rebar	ft	17	0	0	0	0	100	17	0	0
Notes:Some of exposed rebar was spot painted for rust prevention. - 10/7/2019										
202/1:Steel Column	each	16	0	0	100	16	0	0	0	0
1000/1:Corrosion	each	16	0	0	100	16	0	0	0	0
Notes:Completely surface rusted - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
215/1:Re Conc Abutment	ft	52	100	52	0	0	0	0	0	0
231/1:Steel Pier Cap	ft	79	0	0	100	79	0	0	0	0
1000/1:Corrosion	ft	79	0	0	100	79	0	0	0	0
Notes:Completely surface rusted - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	0	0	0	0	100	100	0	0
330/1:Metal Bridge Railing	ft	240	100	240	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
3410/1:Chalk(Steel Protect Coatings)	sq.ft	100	0	0	100	100	0	0	0	0
331/1:Re Conc Bridge Railing	ft	240	0	0	100	240	0	0	0	0
1090/1:Exposed Rebar	ft	12	0	0	100	12	0	0	0	0
Notes:Concrete rail posts have spalls with rebar exposed. - 10/7/2019										
1190/1:Abrasion(PSC/RC)	ft	228	0	0	100	228	0	0	0	0
Notes:Curb and posts show abrasion - 10/7/2019										
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:3/4 of west abutment footing exposed. - 10/7/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Deep gully in front of North abutment caused by runoff coming around NE wing before it turns downward to enter river. The way the gravel is bladed, water sits on the east end of the bridge. - 10/7/2019

Alert Code 2: Large spalls in beam portions of several of the channel beams, several well defined hairline cracks originate in these spalled areas and run upward into deck portion of channel beams. Moderate amount of debris caught against upstream side on pier 2, 3, and 4. - 10/7/2019

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SEC 409

Structure Number: 51-136-35.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	42.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	KIRKELIE TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DES LACS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 NORTH BURLINGTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 17' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 27' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	318205.3 5351110.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 12 22 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 8 16 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	21 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed	2011	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	3 Intolerable - Correct
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.4 Ft.	Underwater	N
48 Length of Max Span	21 Ft.	Other Special	N
49 Structure Length	59.06 Ft.	218 Channel Profile	1 48 06/28/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	17.4 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	18.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Medler, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 51-136-35.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	1,023	100	1,023	0	0	0	0	0	0
111/1:Timber Open Girder	ft	768	100	768	0	0	0	0	0	0
206/1:Timber Column	each	24	0	0	100	24	0	0	0	0
1150/1:Check/Shake	each	24	0	0	100	24	0	0	0	0
Notes:Weathered timber - 10/7/2019										
216/1:Timber Abutment	ft	36	0	0	100	36	0	0	0	0
4000/1:Settlement	ft	36	0	0	100	36	0	0	0	0
Notes:Both abutment caps tipping back causing splitting at tops of pilings. - 10/7/2019										
235/1:Timber Pier Cap	ft	79	0	0	51	40	25	20	24	19
1140/1:Decay/Section Loss	ft	39	0	0	0	0	51	20	49	19
Notes:Ends of pier caps decayed. Abutment caps also beginning to decay, pier cap ends rotted through. - 10/7/2019										
1150/1:Check/Shake	ft	40	0	0	100	40	0	0	0	0
Notes:Weathered timber - 10/7/2019										
332/1:Timb Bridge Railing	ft	118	100	118	0	0	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1140/1:Decay/Section Loss	each	4	0	0	100	4	0	0	0	0
Notes:Decayed piling. Centers are decayed in piling for wings. Wing- wall has pulled away from east abutment; moderate sinkhole behind NE corner of abutment. - 10/7/2019										

Remarks: NBI Remarks: NEW GIRDERS,DECK PLANK AND BRIDGE RAILS AS OLD SUPERSTRUCTURE AND DECK WASHED AWAY IN 2011 FLOOD. Channel makes a 90 degree turn to go under structure - 10/7/2019

Alert Code 2: Centers fo east pier caps decayed in outer 3' or so. Center of west pier caps decayed 1' and North end of pier cap 2 beginning to collapse. - 10/7/2019

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SEC 409

Structure Number: 51-137-35.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	64.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	KIRKELIE TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DES LACS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 NORTH BURLINGTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 17' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 26' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	318826.8 5351249.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 28 50 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 20 37 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	124 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 07, 2019
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.4 Ft.	Other Special	N
48 Length of Max Span	25 Ft.	218 Channel Profile	1 48 06/28/2017
49 Structure Length	49.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 51-137-35.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	872	0	0	66	572	34	300	0	0
1140/1:Decay/Section Loss	sq.ft	300	0	0	0	0	100	300	0	0
Notes:Deck planks are at 80% in wheel tracks (3 'x length of bridge). Several deck plank have moderate to severe wear along wheel path. Third plank (from north) has 3' x 3" piece missing. - 10/7/2019										
1180/1:Abrasion	sq.ft	572	0	0	100	572	0	0	0	0
111/1:Timber Open Girder	ft	551	96	526	0	0	5	25	0	0
1130/1:Cracking (RC and Other)	ft	25	0	0	0	0	100	25	0	0
Notes:Girder 9 (from west) Span 2, has longitudinal crack full length. - 10/7/2019										
206/1:Timber Column	each	19	0	0	100	19	0	0	0	0
1150/1:Check/Shake	each	19	0	0	100	19	0	0	0	0
Notes:Exteriors of abutment piling very weathered with deep weather checks. Interiors have minor to moderate decay. - 10/7/2019										
216/1:Timber Abutment	ft	36	0	0	100	36	0	0	0	0
1150/1:Check/Shake	ft	18	0	0	100	18	0	0	0	0
Notes:Weathered timber - 10/7/2019										
4000/1:Settlement	ft	18	0	0	100	18	0	0	0	0
Notes:North abutment piling beginning to bow inward, from weight of approach embankment . There is a two inch gap between two abutment planks about halfway up north abutment and appears to be a void behind gap. - 10/7/2019										
235/1:Timber Pier Cap	ft	52	0	0	100	52	0	0	0	0
1150/1:Check/Shake	ft	52	0	0	100	52	0	0	0	0
Notes:Weathered timber - 10/7/2019										
332/1:Timb Bridge Railing	ft	98	0	0	100	98	0	0	0	0
1150/1:Check/Shake	ft	98	0	0	100	98	0	0	0	0
Notes:Weathered timber - 10/7/2019										
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1900/1:Distortion	each	1	0	0	100	1	0	0	0	0
Notes:N.W. Wingwall is twisted. - 10/7/2019										

Remarks: Small yellow end markers are up on south end. - 10/7/2019**Alert Code 1:** Several deck plank have moderate to severe wear along wheel path. Third plank (from north) has 3' x 3" piece missing. Some plank split diagonally. - 10/7/2019**Critical Finding**Large tree wedged under span #1 from recent rains. I called Ward County and informed the engineering department on 10-7-19. - 10/7/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-137-35.2

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	68.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	KIRKELIE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DES LACS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 NORTH BURLINGTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 17' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 26' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	319196.1 5351049.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 41 75 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 38 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 07, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	25 Ft.	218 Channel Profile	1 48 06/28/2017
49 Structure Length	49.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 51-137-35.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	400	98	392	2	8	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	8	0	0	100	8	0	0	0	0
Notes:3' x 1' x 2" and 2' x 0.5' x 1" spall on deck side of one of the channel beams. - 10/7/2019										
206/1:Timber Column	each	15	0	0	93	14	0	0	7	1
1150/1:Check/Shake	each	14	0	0	100	14	0	0	0	0
7000/1:Damage	each	1	0	0	0	0	0	0	100	1
Notes:Column behind ice nose broken just above water line. - 10/7/2019										
215/1:Re Conc Abutment	ft	52	0	0	92	48	8	4	0	0
1080/1:Delamination/Spall/Patched Area	ft	48	0	0	100	48	0	0	0	0
Notes:Abutments have hairline cracks. Grout is breaking out of seam where wings join abutments. - 10/7/2019										
1090/1:Exposed Rebar	ft	4	0	0	0	0	100	4	0	0
235/1:Timber Pier Cap	ft	26	0	0	42	11	58	15	0	0
1140/1:Decay/Section Loss	ft	15	0	0	0	0	100	15	0	0
Notes:15' of pier cap has minor crushing on west end. Span 2 beams have settled 1/2" - 3/4" above crushed cap. - 10/7/2019										
1150/1:Check/Shake	ft	11	0	0	100	11	0	0	0	0
330/1:Metal Bridge Railing	ft	98	36	35	64	63	0	0	0	0
1000/1:Corrosion	ft	63	0	0	100	63	0	0	0	0
Notes:Surface rust - 10/7/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
331/1:Re Conc Bridge Railing	ft	98	100	98	0	0	0	0	0	0
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Scour NE off structure - 10/7/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	4	0	0	100	4	0	0	0	0
Notes:Wingwalls have hairline cracks. Grout is breaking out of seam where wings join abutments. Grout also missing in NE and SE corners. - 10/7/2019										

Remarks: Riprap has been placed in front of wingwalls. Small yellow end markers attached to ends of bridge rails. H-beam ice nose on pier bent from ice collision. - 10/7/2019

Alert Code 1: Moderate void back of abutment in NW & NE corners. Lateral movement of channel has progressed to end of NE wing. - 10/7/2019

Alert Code 2: 15' of pier cap has minor crushing on west end. Span 2 beams have settled 1/2" - 3/4" above crushed cap. - 10/7/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-137-35.3

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	KIRKELIE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DES LACS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 NORTH BURLINGTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 17' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 25' 40.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	319913.6 5350728.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 33 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	8.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	99 Ft.	Other Special	N
49 Structure Length	103.02 Ft.	218 Channel Profile	1 48 06/28/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.2 Ft.	213 Federal Aid Project Number	BRO-51(3)
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-137-35.3

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,172	0	0	100	3,172	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	3,172	0	0	100	3,172	0	0	0	0
Notes:Map cracking throughout deck. 0.50MM longitudinal crack full length of deck, 8 feet from east side. There are other 0.20 MM random cracks in deck surface. - 10/7/2019										
104/1:Pre Clsd Box Girder	ft	1,030	100	1,030	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	207	76	157	24	50	0	0	0	0
1130/1:Cracking (RC and Other)	ft	50	0	0	100	50	0	0	0	0
Notes:Vertical cracking in barriers every 3-4'. - 10/7/2019										
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
2210/3:Movement	each	1	0	0	100	1	0	0	0	0
Notes:North slope protection displaced. - 10/7/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: SE corner of concrete footing at S. Abut. cracked and settled 1" - 10/7/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-138-36.0

200 System Designation	2 – County On	Classification	
201 Status	Not Applicable	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Major Collector
04 City	BURLINGTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05137 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MOUSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST BURLINGTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	19.896	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 16' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 24' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	320776.0 5349826.5	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	4		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 41 74 Tons
Membrane	0 None	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 20 36 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	1,650 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	6.00	72 App. Rdwy. Alignment	9 Above Desirable Crit
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	36 Ft.	90 Date of Last Inspection	November 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	36.0 Ft.	Underwater	N
48 Length of Max Span	68 Ft.	Other Special	N
49 Structure Length	275.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	Chaining Date	None
	9.8 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	36.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	46.8 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-138-36.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	13,066	100	13,066	0	0	0	0	0	0
520/3:Conc Re Prot Sys	sq.ft	13,066	100	13,066	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	1,638	100	1,638	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	136	100	136	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	95	100	95	0	0	0	0	0	0
301/3:Pourable Joint Seal	ft	94	100	94	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	279	100	279	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	558	100	558	0	0	0	0	0	0
520/3:Conc Re Prot Sys	sq.ft	558	100	558	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: _ - 11/13/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-139-39.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	BURLINGTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	GASSMAN COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 4 SOUTH BURLINGTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 13' 44.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 23' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	322632.7 5344489.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	9 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	April 05, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	51.84 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	CAP-139-39.1
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Lawson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD, 10X6X52' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 51-139-39.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	207	98	203	2	4	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes:-Minor spalls developing 1' in from the parapet at the east end of the north two barrels. - 4/5/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: -Minor cracks throughout entire structure. -Minor erosion of west inslope above box. - 4/5/2019

Alert Code 1: 2019: 4 ft. of debris is built up in first barrel from North. - 4/5/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-140-38.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Major Collector
04 City	HARRISON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05139 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MOUSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 3 EAST BURLINGTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 14' 45.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 22' 19.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	323912.6 5346348.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 33 60 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1988 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	310 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	April 05, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	60 Ft.	Other Special	N
49 Structure Length	138.12 Ft.	218 Channel Profile	1 48 06/28/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.2 Ft.	213 Federal Aid Project Number	CBRS-5139(51)
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lawson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 51-140-38.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,897	100	3,895	0	2	0	0	0	0
Notes:One small area of efflorescence on underside of deck in span 1. - 4/5/2019										
1080/1:Delamination/Spall/Patched Area	sq.ft	2	0	0	100	2	0	0	0	0
Notes:Small delamination - 4/5/2019										
104/1:Pre Clsd Box Girder	ft	551	100	551	0	0	0	0	0	0
Notes:There is a small chip under 2nd beam from the north in abutment 4. - 4/5/2019										
210/1:Re Conc Pier Wall	ft	62	100	62	0	0	0	0	0	0
Notes:The base of the downstream end of pier 2 is bulged outward due failure of the form during the pouring operation. - 4/5/2019										
215/1:Re Conc Abutment	ft	62	98	61	2	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:A small piece of concrete is broken off the NE corner of abutment 4. - 4/5/2019										
330/1:Metal Bridge Railing	ft	276	0	0	96	264	0	0	4	12
1000/1:Corrosion	ft	264	0	0	100	264	0	0	0	0
Notes:rust starting where paint is missing - 4/5/2019										
7000/1:Damage	ft	12	0	0	0	0	0	0	100	12
Notes:Tear in West guardrail at midspan. - 4/5/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
Notes:Minor to moderate erosion to inslopes in front of abutments; some of the rip rap displaced. - 4/5/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: -Rust stains on both soffits where reinforcing chairs are present. - 4/5/2019

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Structure Number: 51-142-23.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Major Collector
04 City	WATERFORD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	03838 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	EGG CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 N. 1 W. OF RUTHVILLE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	12.198	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 27' 32.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 19' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	328115.9 5369906.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden		70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2013 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	260 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	13 Ft.	Other Special	N
49 Structure Length	42.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	Y
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	07/18/2013
	0.0 Ft.	213 Federal Aid Project Number	ROM-0300(118)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
TRIPLE 13 X 4 X 76' RCB			

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-142-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	228	100	228	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Spall on NE wing wall approximately 2" x 8" x 1' not enough to drop rating of wing since element is -each - 9/23/2019										

Remarks: Moderate washouts on each end where double and single boxes meet. - 9/23/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-142-44.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	65.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	AFTON TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SECOND LARSON COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 1 WEST MINOT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 09' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 19' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	327632.7 5335916.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 16 30 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 11 20 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	25 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 11, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	18 Ft.	218 Channel Profile	1 48 06/28/2017
49 Structure Length	37.07 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Lawson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 51-142-44.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	861	97	837	0	0	3	24	0	0
1140/1:Decay/Section Loss	sq.ft	24	0	0	0	0	100	24	0	0
Notes:1st deck plank, at south end, severely worn. - 4/11/2019										
111/1:Timber Open Girder	ft	702	100	702	0	0	0	0	0	0
206/1:Timber Column	each	15	47	7	0	0	53	8	0	0
1170/1:Split/Delamination (Timber)	each	8	0	0	0	0	100	8	0	0
Notes:Several piling have long, moderate vertical weather checks. - 4/11/2019										
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
Notes:Abutment piling beginning to bow inward from weight of embankment. Back planks at tops of both abutments are shifting. - 4/11/2019										
235/1:Timber Pier Cap	ft	79	49	39	51	40	0	0	0	0
1150/1:Check/Shake	ft	40	0	0	100	40	0	0	0	0
Notes:Deep weather checks starting at top outer ends of north abutment cap. - 4/11/2019										
332/1:Timb Bridge Railing	ft	75	0	0	75	56	0	0	25	19
7000/1:Damage	ft	75	0	0	75	56	0	0	25	19
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	25	1	75	3	0	0	0	0
Notes:One piling in NW and SE wingwalls have pulled away from the wing, but has been braced since last inspection. Top wingwall plank pulled loose from abutment in SE, SW, and NW corner. - 4/11/2019										
1140/1:Decay/Section Loss	each	3	0	0	100	3	0	0	0	0
Notes:Tops of pilings in wingwalls have minor to moderate decay. - 4/11/2019										

Remarks: Deep scour hole under structure (4 feet below incoming channel). - 4/11/2019**Alert Code 1:** South abutment cap rotating back. South abutment piling 1, 2, 3, & 5 split at top. North abutment cap pushed back 2", crushing of cap occurring where it sits on piling. North abutment piling 1, 2, 3, & 4 split at top. - 4/11/2019

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SEC 409

Structure Number: 51-144-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	77.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	TATMAN TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	EGG CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 WEST 1 SOUTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 26' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 16' 39.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	331545.2 5367219.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 20 36 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 13 25 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1965	67 Structural Condition	5 Above Min Tolerable
106 Yr Reconstructed	-1	68 Deck Geometry	5 Above Tolerable
42 Type of Service	1 Highway - On	69 Underclear. Vert & Horiz	N Not applicable (NBI)
	5 Waterway - Under	71 Waterway Adequacy	7 Above Minimum
28 Lanes on Structure	2	72 App. Rdwy. Alignment	7 Above Min Criteria
29 ADT	25	36 Traffic Safety Features	0 1 1 1
30 Year of ADT	2019	113 Scour Critical	U Unknown Scour
109 Average Daily Truck Traffic	-1.00		
19 Bypass, Detour Length	2 Miles		
Geometric Data			
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	17 Ft.	90 Date of Last Inspection	May 14, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.3 Ft.	Underwater	N
48 Length of Max Span	20 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	1 48 06/27/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	23.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-144-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	495	25	125	55	270	20	100	0	0
1180/1:Abrasion	sq.ft	370	0	0	73	270	27	100	0	0
Notes:Bridge deck is worn. - 5/14/2019										
111/1:Timber Open Girder	ft	400	58	230	43	170	0	0	0	0
1150/1:Check/Shake	ft	170	0	0	100	170	0	0	0	0
Notes:Deep weather checks on one or both sides of the following timber girders (from east) : 1 , 2, 3, 10, 13, 15, 17, 18, and 19. - 5/14/2019										
206/1:Timber Column	each	10	0	0	100	10	0	0	0	0
1150/1:Check/Shake	each	10	0	0	100	10	0	0	0	0
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
Notes:Transverse brace across front of north abutment piling is pulled loose in NW corner. - 5/14/2019										
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
235/1:Timber Pier Cap	ft	49	0	0	49	24	51	25	0	0
Notes:Dirt build-up on both abutment caps. - 5/14/2019										
1900/1:Distortion	ft	49	0	0	49	24	51	25	0	0
Notes:North abutment cap bearing only on the back edge of the first three piling from the west. Both abutment caps tipped back and do not rest completely on piling. - 5/14/2019										
332/1:Timb Bridge Railing	ft	46	0	0	50	23	0	0	50	23
1150/1:Check/Shake	ft	23	0	0	100	23	0	0	0	0
7000/1:Damage	ft	23	0	0	0	0	0	0	100	23
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
Notes:Dead-man anchor for NW wing rusted through. - 5/14/2019										
1140/1:Decay/Section Loss	each	4	0	0	100	4	0	0	0	0
Notes:Centers rotted out of wing piling. - 5/14/2019										

Remarks: NBI Remarks: - 5/14/2019 East rail missing. End markers missing in NE, SW, & SE corners. -5/14/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-145-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	TATMAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	EGG CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 WEST 1 SOUTH WOLSETH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 25' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 16' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	331728.5 5366549.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	71 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	43 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	110 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 14, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 06/27/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	09/19/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-145-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	603	100	603	0	0	0	0	0	0
110/1:Re Conc Opn Girder/Beam	ft	200	74	147	27	53	0	0	0	0
1090/1:Exposed Rebar	ft	48	0	0	100	48	0	0	0	0
Notes:Beams 2 & 3 (from north) have small spalls with short sections of rebar exposed. - 5/14/2019										
1130/1:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
Notes:Several random hairline cracks under outside channel beam in NE corner of east abutment. - 5/14/2019										
215/1:Re Conc Abutment	ft	49	82	40	18	9	0	0	0	0
1090/1:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
1190/1:Abrasion(PSC/RC)	ft	8	0	0	100	8	0	0	0	0
Notes:Minor chipping and spalling of precast abutment piling. - 5/14/2019										
4000/1:Settlement	ft	1	100	1	0	0	0	0	0	0
Notes:Minor shifting of precast concrete sections, in west abutment. - 5/14/2019										
234/1:Re Conc Pier Cap	ft	50	50	25	50	25	0	0	0	0
Notes:Hairline cracks in concrete abutment caps. - 5/14/2019										
330/1:Metal Bridge Railing	ft	49	80	39	20	10	0	0	0	0
1000/1:Corrosion	ft	10	0	0	100	10	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	49	76	37	25	12	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	12	0	0	100	12	0	0	0	0
Notes:Concrete bridge rail posts are cracked and or spalled near their top. - 5/14/2019										
8401/1:Wings	each	4	50	2	50	2	0	0	0	0
6000/1:Scour	each	4	50	2	50	2	0	0	0	0
Notes:Scour holes both directions from structure. - 5/14/2019										

Remarks: NBI Remarks: - 5/14/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-145-37.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	77.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Urban, Minor Arterial
04 City	MINOT CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	1 On Interstate STRAHNET
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 1 EAST MINOT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 15' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 15' 10.00"	112 NBIS Bridge Length	No
GPS Coordinates XY	332822.7 5348292.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	-2	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	5 Moderate Damage
44 Approach Struct Type	0 Other	Load Rating and Posting	
	00 Other (NBI)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1967 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5,800 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	4.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	September 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	7 Ft.	Other Special	N
49 Structure Length	6.89 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	Y
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1900
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
SINGLE, 7X75' RCP		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-145-37.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	75	99	74	0	0	0	0	1	1
7000/3:Damage	ft	75	99	74	0	0	0	0	1	1
Notes:1'x2' piece N end of East end section broken off. - 9/23/2019										
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Bottom of east flared end section exposed by scour. - 9/23/2019										

Remarks: -Concrete is spalled around bolts connecting outer barrels and end sections. -Pipe sections have separated 4-8 inches, repaired 2015. - 9/23/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-145-37.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	88.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Urban, Minor Arterial
04 City	MINOT CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	1 On Interstate STRAHNET
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 1 EAST MINOT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 16' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 15' 35.00"	112 NBIS Bridge Length	No
GPS Coordinates XY	332315.7 5348659.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	-2	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	6 Deterioration
44 Approach Struct Type	0 Other	Load Rating and Posting	
	00 Other (NBI)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1967 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5,800 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	4.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	September 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	7 Ft.	Other Special	N
49 Structure Length	6.89 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	Y
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1900
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
SINGLE, 7X75' RCP		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-145-37.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	75	75	56	25	19	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes:-Concrete is spalled around bolts connecting outer barrels and end sections. - 9/23/2019										
1130/3:Cracking (RC and Other)	ft	15	0	0	100	15	0	0	0	0
Notes:A few barrel sections have well defined cracks. - 9/23/2019										
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:-Moderate scour hole at outlet of pipe. -Flared end beginning to be undercut. - 9/23/2019										

Remarks: Pipe sections have separated 4-5", repaired 2015. - 9/23/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-146-41.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	SUNDRE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	FIRST LARSON COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 3 NORTH LOGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 11' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 14' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	333802.9 5340561.8	Condition	
98 Border Bridge	Not Applicable (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	32 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2015 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	950 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	6.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	September 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	26.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	29.00 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	11/10/2015
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0051(020)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE 14 X 14 X 96' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-146-41.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	192	99	190	1	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Small spalls on both barrels of East end. - 9/23/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-146-41.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	SUNDRE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LARSON COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	3W 3N LOGAN ON OLD HWY 52	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 11' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 14' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	333767.6 5340029.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	4	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	9 Above Desirable Crit
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2019	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	April 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	40.4 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	42.98 Ft.	218 Channel Profile	– 01/01/1901
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	40.4 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	42.0 Ft.	213 Federal Aid Project Number	CAP-146-41.1
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Medler, Lawson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
QUAD., 10X6X42' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-146-41.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/2:Re Conc Culvert	ft	167	95	159	5	8	0	0	0	0
1090/2:Exposed Rebar	ft	8	0	0	100	8	0	0	0	0
Notes:A few small shallow spalls developing on face of both parapets with exposed rebar. - 4/8/2019										
1130/2:Cracking (RC and Other)	ft	159	100	159	0	0	0	0	0	0
Notes:-Hairline cracks in box walls - 4/8/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: -Minor hairline cracks throughout entries structure. -Top outer edge of west parapet, toward south end, chipped during recent removal of silt and gravel from culvert barrels. -1' of sediment in north barrel.(2019)
 -Erosion developing between parapets and edges of asphalt. - 4/8/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-146-50.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	WILLIS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 6 SOUTH LOGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 04' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 13' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	333834.6 5326151.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 34 61 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 37 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	26 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1969 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 11, 2019
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 07/05/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	09/19/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Lawson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 51-146-50.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	200	75	150	25	50	0	0	0	0
1090/1:Exposed Rebar	ft	50	0	0	100	50	0	0	0	0
Notes:Small spalls developing along underside of a few of channel beams. Short sections of rebar exposed. - 4/11/2019										
206/1:Timber Column	each	14	0	0	100	14	0	0	0	0
1150/1:Check/Shake	each	14	0	0	100	14	0	0	0	0
216/1:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
Notes:North abutment bowing towards channel. - 4/11/2019										
235/1:Timber Pier Cap	ft	52	0	0	100	52	0	0	0	0
1150/1:Check/Shake	ft	52	0	0	100	52	0	0	0	0
Notes:Abutment cap pushed forward, to front of piling, in NW corner. Strap, over top of cap, being pulled loose from piling. - 4/11/2019										
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	49	92	45	8	4	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes:Tops of four posts are spalled. - 4/11/2019										
8401/1:Wings	each	4	50	2	50	2	0	0	0	0
1140/1:Decay/Section Loss	each	4	50	2	50	2	0	0	0	0
Notes:Centers decaying in outer piling of SE and SW wings. - 4/11/2019										

Remarks: Bridge is located on a winding, unimproved section line road. 1 to 2 ft. washouts at outer ends of all wingwalls. 1 ft x 1 ft x 4 ft sinkhole at NW corner of deck. - 4/11/2019

Alert Code 1: 8 FOOT LATERAL MOVEMENT OF CHANNEL ADJACENT TO SW WING. APPROACH EMBANKMENT BEING ERODED. Year 2019: SW END MARKER IS MISSING. - 4/11/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-147-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	TATMAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	EGG CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 2 NORTH RUTHVILLE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 24' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 13' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	335210.0 5363219.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 35 63 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 38 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	24 Gravel/Dir	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 14, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 06/27/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	09/19/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 51-147-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	200	0	0	99	197	2	3	0	0
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	0	0	100	3	0	0
1130/1:Cracking (RC and Other)	ft	197	0	0	100	197	0	0	0	0
Notes:Minor cracking and spalling of concrete surfaces. - 5/14/2019										
215/1:Re Conc Abutment	ft	49	0	0	92	45	8	4	0	0
1090/1:Exposed Rebar	ft	4	0	0	0	0	100	4	0	0
Notes:A few of the pre-cast abutment sections are spalled rebar is exposed with minor section loss. - 5/14/2019										
1190/1:Abrasion(PSC/RC)	ft	45	0	0	100	45	0	0	0	0
234/1:Re Conc Pier Cap	ft	25	92	23	8	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Large spall in cast in place cap at inner end of se wing. - 5/14/2019										
330/1:Metal Bridge Railing	ft	49	88	43	12	6	0	0	0	0
7000/1:Damage	ft	6	0	0	100	6	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	49	94	46	4	2	0	0	2	1
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Large spall in cast in place cap at inner end of se wing. - 5/14/2019										
7000/1:Damage	ft	1	0	0	0	0	0	0	100	1
Notes:Spalls on the inside of outside stringers where rail posts are bolted to the bridge. 2nd rail post from the East is shattered by a collision - 5/14/2019										
8401/1:Wings	each	4	75	3	25	1	0	0	0	0

Remarks: NBI Remarks: Large scour hole under bridge. There is minor shifting of precast sections. - 5/14/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-147-41.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	SUNDRE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SOURIS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 3 NORTH LOGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 11' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 12' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	335536.8 5340502.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 27 49 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1997 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	230 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	11.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	April 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	68 Ft.	Other Special	N
49 Structure Length	208.01 Ft.	218 Channel Profile	1 48 06/28/2017
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	5.2 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	27.9 Ft.	213 Federal Aid Project Number	DPI-0036(003)511
52 Deck Width	36.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Lawson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 51-147-41.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	7,589	100	7,589	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	1,040	100	1,040	0	0	0	0	0	0
Notes:-Spall developing in diaphragm by beams 1, 3, & 4 in span 1. - 4/8/2019										
210/3:Re Conc Pier Wall	ft	69	100	69	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	79	96	76	4	3	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:-Light efflorescence along cold joint for abutment backwalls. -Vertical hairline cracks in west abutment with efflorescence. - 4/8/2019										
330/2:Metal Bridge Railing	ft	210	100	210	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	417	96	402	4	15	0	0	0	0
1130/2:Cracking (RC and Other)	ft	417	96	402	4	15	0	0	0	0
Notes:-Vertical cracks in jersey barriers. A small spall/ traffic damage at lower end of NW jersey barrier transition. - 4/8/2019										
8398/3:Slope Protection	each	4	100	4	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-147-46.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	SUNDRE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 2 NORTH LOGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 07' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 12' 45.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	335372.1 5332497.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 37 67 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 40 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1967 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 08, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 06/27/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	09/19/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Lawson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-147-46.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	200	100	200	0	0	0	0	0	0
Notes:Water is seeping between seams of concrete channel beams. - 4/8/2019										
206/1:Timber Column	each	6	100	6	0	0	0	0	0	0
216/1:Timber Abutment	ft	52	100	52	0	0	0	0	0	0
Notes:Rip rap added along base of west abutment. - 4/8/2019										
225/1:Steel Pile	(EA)	5	80	4	20	1	0	0	0	0
1900/1:Distortion	(EA)	1	0	0	100	1	0	0	0	0
231/1:Steel Pier Cap	ft	26	100	26	0	0	0	0	0	0
235/1:Timber Pier Cap	ft	26	100	26	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	49	96	47	4	2	0	0	0	0
1090/1:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
Notes:Large spall on outside of curb toward NE corner. - 4/8/2019										
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0
Notes:NE wing starting to twist. - 4/8/2019										

Remarks: Short sight distance from both directions. Channel, downstream, is choked with brush. Rip rap added along south channel bank. - 4/8/2019

Alert Code 1: Deep scour hole has exposed bottom of east abutment. (2019)End Markers are missing. - 4/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-148-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	44.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	TATMAN TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	EGG CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 1 NORTH RUTHVILLE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 23' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 12' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	336807.4 5361561.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 8 16 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 5 10 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	14 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	4 Tolerable
29 ADT	5 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 14, 2019
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	21 Ft.	218 Channel Profile	1 48 06/27/2017
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-148-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	560	79	440	21	120	0	0	0	0
Notes:12-12-17 - All deck planks but 5 have been replaced. - 5/14/2019										
1150/1:Check/Shake	sq.ft	560	79	440	21	120	0	0	0	0
111/1:Timber Open Girder	ft	360	73	264	13	48	13	48	0	0
1150/1:Check/Shake	ft	48	0	0	100	48	0	0	0	0
Notes:Girders 3 and 6 (from north) have deep weather check their full length. - 5/14/2019										
1160/1:Crack (Timber)	ft	48	0	0	0	0	100	48	0	0
Notes:Broken girders 7 & 9 repaired with u-clamps and adjacent girder and cracked girder repaired with u-clamps. - 5/14/2019										
206/1:Timber Column	each	10	0	0	100	10	0	0	0	0
1150/1:Check/Shake	each	10	0	0	100	10	0	0	0	0
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
235/1:Timber Pier Cap	ft	49	0	0	100	49	0	0	0	0
Notes:Heavy deposits of sand and silt on both abutment caps. - 5/14/2019										
1150/1:Check/Shake	ft	49	0	0	100	49	0	0	0	0
332/1:Timb Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
Notes:West wing walls twisted. - 5/14/2019										
1140/1:Decay/Section Loss	each	4	0	0	100	4	0	0	0	0
Notes:Centers decaying in all wing wall piling. - 5/14/2019										

Remarks: 8-15-2019 - Load Posting installed Aug 15, 2019. cta

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-148-46.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	KEMP COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 2 SOUTH LOGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 08' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 11' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	337323.5 5333620.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1998 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	3 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	21.98 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	0.0 Ft.	213 Federal Aid Project Number	DPI-0036(004)511
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Lawson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
DOUBLE, 10X6X60' PRECAST RCB			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-148-46.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	121	0	0	99	120	1	1	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	0	0	100	1	0	0
Notes:Short vertical spall in center wall south barrel with rebar exposed. - 4/8/2019										
4000/1:Settlement	ft	120	0	0	100	120	0	0	0	0
Notes:1 -1.5' of silt deposit on the end of south barrel. - 4/8/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: (2019) The west end channel needs to be clean up, off of the end of the box. - 4/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-149-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	MCKINLEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	EGG CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST RUTHVILLE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 22' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 09' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	339629.3 5359663.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 38 69 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 23 42 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 14, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.3 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 07/05/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-149-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	200	0	0	63	125	38	75	0	0
1090/1:Exposed Rebar	ft	75	0	0	0	0	100	75	0	0
Notes:One channel beam has approx. 10 ft. of spalled concrete along bottom of member with short section of rebar exposed. Several other beams have longitudinal spalls developing on bottom, plus hairline cracks along the sides approx. 1 in. up from bottom. - 5/14/2019										
1130/1:Cracking (RC and Other)	ft	125	0	0	100	125	0	0	0	0
Notes:Minor diagonal cracks extend out and down from corners of both breast walls. Several other beams have longitudinal spalls developing on bottom, plus hairline cracks along the sides approx. 1 in. up from bottom. - 5/14/2019										
215/1:Re Conc Abutment	ft	52	2	1	94	49	4	2	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
Notes:1.5' vertical spall in concrete abutment panel with rebar exposed. - 5/14/2019										
1190/1:Abrasion(PSC/RC)	ft	48	0	0	100	48	0	0	0	0
6000/1:Scour	ft	1	0	0	100	1	0	0	0	0
Notes:Scour hole under structure (2 - 3 ft. deep). - 5/14/2019										
330/1:Metal Bridge Railing	ft	49	0	0	100	49	0	0	0	0
1000/1:Corrosion	ft	49	0	0	100	49	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
331/1:Re Conc Bridge Railing	ft	49	0	0	88	43	12	6	0	0
1090/1:Exposed Rebar	ft	6	0	0	0	0	100	6	0	0
Notes:Concrete rail posts spalling around bottom by bolts. Large vertical spall with exposed rebar in SW rail post. - 5/14/2019										
1190/1:Abrasion(PSC/RC)	ft	43	0	0	100	43	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor spalling and cracking of concrete surfaces. End markers are down. - 5/14/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-149-49.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	WILLIS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 5 SOUTH LOGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 05' 06.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 09' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	338670.3 5327999.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 36 66 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 40 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 08, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 07/05/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Lawson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 51-149-49.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	200	100	200	0	0	0	0	0	0
206/1:Timber Column	each	14	0	0	100	14	0	0	0	0
1150/1:Check/Shake	each	14	0	0	100	14	0	0	0	0
216/1:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
1150/1:Check/Shake	ft	52	0	0	100	52	0	0	0	0
Notes:South abutment bowed inward approx. three inches, causing one piling to pull away from top planks a couple inches. - 4/8/2019										
235/1:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	49	100	49	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
Notes:Channel scour along south abutment. - 4/8/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
Notes:Centers decaying in all wingwall piling. - 4/8/2019										

Remarks: All joints between concrete channels are seeping water. Lateral movement of channel has progressed to outer end of SW wing. Channel bank also sloughing at this location. Run-off from intersecting ditch appears to be the cause. Minor build-up of silt under north end of bridge. Major erosion of channel bank NW of bridge also starting to erode behind NW wing wall. Year 2019: NW end marker is missing. NW bank has riprap installed. - 4/8/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-149-50.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	WILLIS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 SOUTH LOGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 03' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 10' 16.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	338259.3 5325954.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 29 53 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 17 32 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	4 Tolerable
29 ADT	5 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 08, 2019
32 Approach Roadway Width	10 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	31 Ft.	218 Channel Profile	1 48 06/29/2017
49 Structure Length	30.84 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Lawson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Structure Number: 51-149-50.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	249	95	237	0	0	5	12	0	0
1080/1:Delamination/Spall/Patched Area	ft	12	0	0	0	0	100	12	0	0
Notes:Small spalls along bottom of a few of channel beams with very short sections of rebar exposed. - 4/8/2019										
206/1:Timber Column	each	14	0	0	100	14	0	0	0	0
1150/1:Check/Shake	each	14	0	0	100	14	0	0	0	0
216/1:Timber Abutment	ft	52	0	0	50	26	50	26	0	0
1150/1:Check/Shake	ft	52	0	0	50	26	50	26	0	0
Notes:Bottom plank in east abutment moderately to severely decayed - 4/8/2019										
235/1:Timber Pier Cap	ft	52	100	52	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	62	100	62	0	0	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
Notes:Centers are rotted in the wingwall piling. - 4/8/2019										

Remarks: Bottoms of channel beams covered with efflorescence. 6 "x 12", yellow end markers at deck corners. - 4/8/2019

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SEC 409

Structure Number: 51-150-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	MARGARET TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE DEEP CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST WOLSETH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 26' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 08' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	341226.7 5367971.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	3 Open Grating	64 Oper. Rating	HS 49 89 Tons
108 Wearing Surface	9 Other	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 29 54 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1963 106 Yr Reconstructed	1998	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	5 30 Year of ADT	2019	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	16 Ft.	90 Date of Last Inspection	September 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.3 Ft.	Underwater	N
48 Length of Max Span	31 Ft.	Other Special	N
49 Structure Length	34.12 Ft.	218 Channel Profile	1 48 06/27/2017
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	Chaining Date	None
	0.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	212 Structure Load Rated	06/26/2017
52 Deck Width	27.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Olson, Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 51-150-24.0

Element / Env. / Description		Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
28/1:Steel Deck - Open Grid		sq.ft	915	0	0	100	915	0	0	0	0
1000/1:Corrosion		sq.ft	913	0	0	100	913	0	0	0	0
Notes:Surface rusted - 9/23/2019											
7000/1:Damage		sq.ft	2	0	0	100	2	0	0	0	0
Notes:1' of deck bent on south end, west wheel track. - 9/23/2019											
515/1:Steel Protective Coating		sq.ft	100	0	0	0	0	100	100	0	0
3440/1:Eff (Stl Protect Coat)		sq.ft	100	0	0	0	0	100	100	0	0
107/1:Steel Opn Girder/Beam		ft	302	100	302	0	0	0	0	0	0
515/1:Steel Protective Coating		sq.ft	100	0	0	0	0	100	100	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co		sq.ft	100	0	0	0	0	100	100	0	0
Notes:Paint system is chalking and peeling with no section loss. - 9/23/2019											
206/1:Timber Column		each	10	0	0	100	10	0	0	0	0
1150/1:Check/Shake		each	7	0	0	100	7	0	0	0	0
Notes:Weathered timber - 9/23/2019											
1900/1:Distortion		each	3	0	0	100	3	0	0	0	0
Notes:3 piling leaning inward in North abutment. - 9/23/2019											
216/1:Timber Abutment		ft	49	0	0	100	49	0	0	0	0
1150/1:Check/Shake		ft	49	0	0	100	49	0	0	0	0
Notes:Weathered timber - 9/23/2019											
235/1:Timber Pier Cap		ft	56	100	56	0	0	0	0	0	0
332/1:Timb Bridge Railing		ft	66	100	66	0	0	0	0	0	0
6000/1:Scour		each	1	0	0	100	1	0	0	0	0
Notes:Large scour hole under structure. Hole is four to five ft. lower than adjacent channel. - 9/23/2019											
8401/1:Wings		each	4	0	0	100	4	0	0	0	0
1140/1:Decay/Section Loss		each	4	0	0	100	4	0	0	0	0
Notes:All wing piling starting to decay - 9/23/2019											

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Structure Number: 51-150-44.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	51.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MOUSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST LOGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 09' 26.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 09' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	339432.2 5336004.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	6 Corrugated Steel	64 Oper. Rating	HS 12 23 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 7 13 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	33 Asphalt	209 Posted in "Tons"	21 Tons
Age and Service		Appraisal	
27 Yr Built	1992 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	2 Intolerable - Replace
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	12 Ft. 8 In.	90 Date of Last Inspection	April 11, 2019
32 Approach Roadway Width	17 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 04/11/2019
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.4 Ft.	Other Special	N
48 Length of Max Span	117 Ft.	218 Channel Profile	1 48 06/29/2017
49 Structure Length	122.05 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	17.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	12 Ft. 8 In.	216 Inspector	Medler, Olson, Lawson, Devries
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 51-150-44.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
30/1:Steel Deck - Orthotropic	sq.ft	2,164	50	1,082	50	1,082	0	0	0	0
3220/1:Crack (Wearing Surface)	sq.ft	1,082	0	0	100	1,082	0	0	0	0
Notes:Pavement alligator cracked. - 4/11/2019										
510/1:Wearing Surfaces	sq.ft	2,164	100	2,164	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	50	50	50	50	0	0	0	0
3420/1:Peel/Bub/Crack(Stl Protect Co)	sq.ft	100	50	50	50	50	0	0	0	0
Notes:Paint starting to peel. - 4/11/2019										
113/1:Steel Stringer	ft	853	99	841	1	12	0	0	0	0
1020/1:Connection	ft	12	0	0	100	12	0	0	0	0
Notes:Rust in lower connections - 4/11/2019										
120/1:Steel Truss	ft	243	98	239	2	4	0	0	0	0
1020/1:Connection	ft	4	0	0	100	4	0	0	0	0
Notes:Rollers in south bearing plates for south truss end posts are frozen with rust. - 4/11/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
152/1:Steel Floor Beam	ft	95	100	95	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	36	86	31	14	5	0	0	0	0
Notes:Back of abutment at the south end of bridge spalled from bearing plate. Heavy "L" shaped plates were bolted to front and extend across top and back of south abutment. Plates cover spalled areas and now support truss end posts.Top of north abutment leaning in 1" at top. - 4/11/2019										
1130/1:Cracking (RC and Other)	ft	5	0	0	100	5	0	0	0	0
Notes:Numerous vertical cracks in concrete of both abutments. - 4/11/2019										
330/1:Metal Bridge Railing	ft	243	50	121	50	122	0	0	0	0
1900/1:Distortion	ft	122	0	0	100	122	0	0	0	0
Notes:Angle iron bridge rails moderately bent at several locations. - 4/11/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0
Notes:NW & NE wingwall has a hairline vertical crack. - 4/11/2019										

Remarks: Holes were cut at lower end of end posts (probably as lifting points when bridge was moved) then only partially welded closed. A few of the top and bottom lateral braces are loose. Diagonal brace, from U3 to L2 Rt is bent and very loose. Inside diagonal from U2 to L3 Lt. has a quarter twist in member, and a kink approx. 4' above lower connection. Vertical from U2 to L2 Rt is bent 9/16" from plumb. Inside diagonal from U1 to L2 Rt is bent to the south 2 - 3". Roadway has 90 degree curve to the west just off north end of structure. (2019) SW is missing and NW end marker have moderate damage. - 4/11/2019

Fracture Critical: The inspection was done using a ladder and flash light to get within hand length along mirrors and binoculars. - 4/11/2019

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Structure Number: 51-150-44.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	90.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Major Collector
04 City	SUNDRE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05146 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SOURIS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	EAST EDGE LOGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	6.798	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 09' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 09' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	340086.4 5335553.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	60 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	28 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	32 Asphalt	209 Posted in "Tons"	25 Tons
Age and Service		Appraisal	
27 Yr Built	1967 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	100 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 08, 2019
32 Approach Roadway Width	30 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.9 Ft.	Other Special	N
48 Length of Max Span	53 Ft.	218 Channel Profile	1 48 06/29/2017
49 Structure Length	110.89 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	28.9 Ft.	213 Federal Aid Project Number	BELL BRIDGE
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Lawson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-150-44.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,208	0	0	50	1,604	50	1,604	0	0
3210/1:Del/Spall/Patch/Pot(Wear Surf)	sq.ft	1,604	0	0	100	1,604	0	0	0	0
Notes:Cracking in the asphalt overlay on the deck at midway point of the structure, and the remaining sections of the deck has areas of moderate to severe raveling in asphalt surfacing. - 4/8/2019										
3220/1:Crack (Wearing Surface)	sq.ft	1,604	0	0	0	0	100	1,604	0	0
510/1:Wearing Surfaces	sq.ft	3,208	100	3,208	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	1,109	99	1,102	1	7	0	0	0	0
210/1:Re Conc Pier Wall	ft	30	90	27	10	3	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
1130/1:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
215/1:Re Conc Abutment	ft	62	97	60	3	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
233/1:Pre Conc Pier Cap	ft	30	90	27	10	3	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:Small spall on the pier on the south end towards the top. - 4/8/2019										
1130/1:Cracking (RC and Other)	ft	2	0	0	100	2	0	0	0	0
330/1:Metal Bridge Railing	ft	223	0	0	100	223	0	0	0	0
1000/1:Corrosion	ft	223	0	0	100	223	0	0	0	0
Notes:Light corrosion - 4/8/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	223	96	213	5	10	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Concrete curb showing signs of deterioration. - 4/8/2019										
1130/1:Cracking (RC and Other)	ft	8	0	0	100	8	0	0	0	0
6000/1:Scour	each	1	100	1	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-150-44.2

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	SUNDRE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JURIS R. ABANDONED CHAN	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 1 NORTH LOGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 09' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 08' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	340466.6 5335676.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 40 72 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	120 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	April 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.2 Ft.	Underwater	N
48 Length of Max Span	45 Ft.	Other Special	N
49 Structure Length	94.16 Ft.	218 Channel Profile	1 48 06/29/2017
50 Curb/Sidewalk Widths	1.6 Ft Rt-Side	Chaining Date	None
	1.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.5 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.2 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Medler, Lawson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 51-150-44.2

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/1:Pre Opn Conc Girder/Beam	ft	751	100	749	0	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Small, spalls on T-beams in Span 2. - 4/8/2019										
210/1:Re Conc Pier Wall	ft	33	97	32	3	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
215/1:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	6	100	6	0	0	0	0	0	0
Notes:Hairline cracks in both abutments. - 4/8/2019										
331/1:Re Conc Bridge Railing	ft	187	98	183	2	4	0	0	0	0
Notes:Random hairline cracks & a few shallow spalls in jersey barriers. - 4/8/2019										
1090/1:Exposed Rebar	ft	4	0	0	100	4	0	0	0	0
1130/1:Cracking (RC and Other)	ft	183	100	183	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-150-46.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	SUNDRE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH OF LOGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 07' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 09' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	339587.3 5332579.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 42 76 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 39 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1969 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 08, 2019
32 Approach Roadway Width	19 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	25 Ft.	218 Channel Profile	1 48 07/05/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Lawson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-150-46.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
16/1:Re Conc Top Flange	sq.ft	646	100	644	0	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	2	0	0	100	2	0	0	0	0
Notes:2'x1' spall in south wheel track about 5' from east end. - 4/8/2019										
110/1:Re Conc Opn Girder/Beam	ft	200	88	175	13	25	0	0	0	0
1090/1:Exposed Rebar	ft	25	0	0	100	25	0	0	0	0
Notes:Minor spalling on the beam portion of precast channels. - 4/8/2019										
206/1:Timber Column	each	12	100	12	0	0	0	0	0	0
216/1:Timber Abutment	ft	56	0	0	100	56	0	0	0	0
1900/1:Distortion	ft	56	0	0	100	56	0	0	0	0
Notes:SE corner of east abutment leaning back 4-5". - 4/8/2019										
235/1:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	49	84	41	16	8	0	0	0	0
1130/1:Cracking (RC and Other)	ft	8	0	0	100	8	0	0	0	0
Notes:Cracks developing around bolt holes in concrete rail posts. - 4/8/2019										
332/1:Timb Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Poor horizontal alignment. 2'x1' spall in south wheel track about 5' from east end. End markers are up. Element 16 added by Bridge Division cta 6/10/2019. - 4/8/2019

Alert Code 1: Channel scour has partially exposed bottom of west abutment. - 4/8/2019

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SEC 409

Structure Number: 51-150-46.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	SUNDRE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH OF LOGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 07' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 08' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	340286.4 5332741.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 37 67 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 40 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965	67 Structural Condition	6 Equal Min Criteria
106 Yr Reconstructed	-1	68 Deck Geometry	6 Equal Min Criteria
42 Type of Service	1 Highway - On	69 Underclear. Vert & Horiz	N Not applicable (NBI)
	5 Waterway - Under	71 Waterway Adequacy	5 Above Tolerable
28 Lanes on Structure	2	72 App. Rdwy. Alignment	5 Above Tolerable
29 ADT	25 30 Year of ADT	36 Traffic Safety Features	0 0 0 0
109 Average Daily Truck Traffic	-1.00	113 Scour Critical	U Unknown Scour
19 Bypass, Detour Length	6 Miles		
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 08, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 07/05/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	09/19/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lawson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 51-150-46.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	200	60	120	32	64	8	16	0	0
1090/1:Exposed Rebar	ft	80	0	0	80	64	20	16	0	0
Notes:Spalling of beam portion of precast channels, exposing rebar. - 4/8/2019										
206/1:Timber Column	each	20	0	0	95	19	5	1	0	0
1150/1:Check/Shake	each	19	0	0	100	19	0	0	0	0
Notes:Tops of several piling are cracking from pressure of tipping caps. - 4/8/2019										
1170/1:Split/Delamination (Timber)	each	1	0	0	0	0	100	1	0	0
Notes:3rd piling (from the north) east abutment is split in two vertically. - 4/8/2019										
216/1:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
1900/1:Distortion	ft	52	0	0	100	52	0	0	0	0
Notes:East abutment leaning a few inches. - 4/8/2019										
235/1:Timber Pier Cap	ft	52	0	0	0	0	100	52	0	0
1900/1:Distortion	ft	52	0	0	0	0	100	52	0	0
Notes:Voids were found under ends of precast stringers, where they extend back of abutment. Abutment cap and top planks are tipping toward this void. - 4/8/2019										
331/1:Re Conc Bridge Railing	ft	49	96	47	4	2	0	0	0	0
1090/1:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
Notes:End of NE curb chipped, with rebar exposed. Concrete rail post, at same location also spalled. - 4/8/2019										
332/1:Timb Bridge Railing	ft	49	100	49	0	0	0	0	0	0
8398/1:Slope Protection	each	1	0	0	100	1	0	0	0	0
Notes:Rip rap has been placed along channel banks adjacent to all wings to reduce lateral movement of creek. - 4/8/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
Notes:SE Wing Piling are split and are starting to crush (and Split). - 4/8/2019										

Remarks: Channel scour both directions from bridge. - 4/8/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-151-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	MARGARET TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE DEEP CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST WOLSETH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 26' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 08' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	341576.8 5367872.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 37 67 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 40 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	35 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 23, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 06/27/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	09/19/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-151-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	200	100	200	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	49	0	0	100	49	0	0	0	0
1130/1:Cracking (RC and Other)	ft	49	0	0	100	49	0	0	0	0
Notes:Well defined, random cracks radiate across lower, outer half of abutment caps then downward and around to inner corner of wings. West abutment cap has minor cracking around a patched area. - 9/23/2019										
330/1:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	49	94	46	0	0	6	3	0	0
7000/1:Damage	ft	3	0	0	0	0	100	3	0	0
Notes:Broken railing post & one is cracked on south side of bridge. Minor hairline cracks of concrete surfaces. - 9/23/2019										
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Large scour hole under and downstream from bridge. - 9/23/2019										
8401/1:Wings	each	4	50	2	50	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes:Spall at inner edge of NW wing, with rebar exposed. Medium spall at top of NW wing next to abutment. - 9/23/2019										
1130/1:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:1/2 to 3/4 inch crack on east abutment by SE wing. - 9/23/2019										

Remarks: Concrete overlay of preformed concrete abutment planks, is deteriorating below high water line. Upstream channel is choked with cat-tails and brush. End markers are up. - 9/23/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-151-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	MARGARET TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE DEEP CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH WOLSETH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 26' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 07' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	342806.6 5366677.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 25 46 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 12 22 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	45 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	3 SC - Unstable
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 23, 2019
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.2 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	1 48 06/27/2017
49 Structure Length	35.10 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	28.5 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-151-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	351	100	351	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	59	49	29	0	0	51	30	0	0
1080/1:Delamination/Spall/Patched Area	ft	30	0	0	0	0	100	30	0	0
Notes:Most of south abutment has large spalled areas along the top of abutment. South abutment has minor vertical cracks. NE corner of north abutment has a small spall. Rebar and what appears to be small diameter steel encased piling are exposed - 9/23/2019										
330/1:Metal Bridge Railing	ft	69	100	69	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	69	96	66	0	0	4	3	0	0
1090/1:Exposed Rebar	ft	3	0	0	0	0	100	3	0	0
Notes:NE corner of curb and guardrail post has been damaged with rebar exposed. - 9/23/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Scour hole to east of bridge, heavy cat-tail growth to west. End markers in place. - 9/23/2019

Structure Number: 51-151-44.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Major Collector
04 City	NEW PRAIRIE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05146 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BRANCH OF SOURIS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST LOGAN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	7.099	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 09' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 08' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	340683.5 5335534.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 36 65 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 33 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	32 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1979 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	100 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	1 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	April 08, 2019
32 Approach Roadway Width	28 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.5 Ft.	Other Special	N
48 Length of Max Span	44 Ft.	218 Channel Profile	1 48 06/27/2017
49 Structure Length	91.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.6 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.6 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	28.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lawson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 51-151-44.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,648	100	2,648	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	2,648	100	2,648	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	735	100	735	0	0	0	0	0	0
Notes:Few small spalls on tee beams in span 2.,-minor-no defect. - 4/8/2019										
204/1:Pre Conc Column	each	8	100	8	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	4	100	4	0	0	0	0	0	0
233/1:Pre Conc Pier Cap	ft	30	60	18	0	0	40	12	0	0
1080/1:Delamination/Spall/Patched Area	ft	12	0	0	0	0	100	12	0	0
Notes:Two large areas (3'x3.5') of delamination on east side of pier cap. Another area of delamination near center of pier on west side. Spalled concrete at this site approx. 3" deep.Grout, between tee-beam sections, has spalled away above pier cap. Allowing gravel to come through gaps. - 4/8/2019										
331/1:Re Conc Bridge Railing	ft	184	0	0	100	184	0	0	0	0
1090/1:Exposed Rebar	ft	12	0	0	100	12	0	0	0	0
1130/1:Cracking (RC and Other)	ft	172	0	0	100	172	0	0	0	0
Notes:Several vertical 0.25 mm cracks in jersey barriers. 0.2-0.6 mm diagonal crack starts at middle lower end of barrier & angles up & outward to face at SW corner of bridge. - 4/8/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Considerable efflorescence along cold joint, between jersey barrier and bridge deck in Span two, on east side. - 4/8/2019

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SEC 409

Structure Number: 51-151-49.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	SAWYER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST OF SAWYER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 05' 29.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 07' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	341440.0 5328656.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2007 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	April 11, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	10.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	AC-BRO-0051(012)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Medler
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14'X 10'X 64' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 51-151-49.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	128	100	128	0	0	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
2210/1:Movement	each	2	0	0	100	2	0	0	0	0
Notes:Riprap displaced and washed to the north. - 4/11/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: Two, small spall in top of south parapet. - 4/11/2019**Alert Code 1:** 1 Ft of silt deposit in both barrels. Moderate scour 2' to 3' deep off the north end of box. NW bank eroded 10' laterally to the west off end of NW wing. - 4/11/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-151-54.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	51.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	NEWMAN TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	OAK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 5 SOUTH SAWYER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 00' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 07' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	341792.0 5319789.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 10 18 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 7 13 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	18 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 14, 2019
32 Approach Roadway Width	21 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.6 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 06/29/2017
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.6 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-151-54.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	570	18	105	82	465	0	0	0	0
1150/1:Check/Shake	sq.ft	570	18	105	82	465	0	0	0	0
111/1:Timber Open Girder	ft	456	95	432	5	24	0	0	0	0
1160/1:Crack (Timber)	ft	24	0	0	100	24	0	0	0	0
Notes:Girder 7 has crack starting around a knot. - 5/14/2019										
206/1:Timber Column	each	13	0	0	92	12	8	1	0	0
1150/1:Check/Shake	each	12	0	0	100	12	0	0	0	0
Notes:Timber elements weathered - 5/14/2019										
7000/1:Damage	each	1	0	0	0	0	100	1	0	0
216/1:Timber Abutment	ft	52	46	24	54	28	0	0	0	0
Notes:West ends, of south abutment back planks are ice damaged. Top planks on north abutment are buckling. South abutment starting to bow inward. West pile, south abutment, has been repaired with extra planking. - 5/14/2019										
1150/1:Check/Shake	ft	27	0	0	100	27	0	0	0	0
Notes:Timber elements weathered - 5/14/2019										
6000/1:Scour	ft	1	0	0	100	1	0	0	0	0
Notes:Local channel scour along north abutment (approx 2ft.). - 5/14/2019										
235/1:Timber Pier Cap	ft	52	0	0	100	52	0	0	0	0
Notes:North abutment cap tipped back 1" plus. - 5/14/2019										
1150/1:Check/Shake	ft	52	0	0	100	52	0	0	0	0
Notes:South abutment cap starting to crack horizontally. - 5/14/2019										
332/1:Timb Bridge Railing	ft	49	51	25	49	24	0	0	0	0
1150/1:Check/Shake	ft	49	51	25	49	24	0	0	0	0
Notes:Timber elements weathered - 5/14/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1140/2:Decay/Section Loss	each	2	0	0	100	2	0	0	0	0
Notes:Outer edge of NW wing has moderate debris collision damage. Centers, of wingwall piling, are decaying. - 5/14/2019										
6000/1:Scour	each	2	0	0	100	2	0	0	0	0
Notes:Outer third of SW & NW wings un-supported due to erosion of approach embankment. - 5/14/2019										

Remarks: 5-14-2019 - New load limit signs in place 8 Ton per axle, 18 ton Gross. New end markers. - 5/14/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-153-53.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	SAWYER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	OAK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 5 SOUTH SAWYER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 05' 03.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	344616.8 5321031.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	74 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	44 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	29 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed	2008	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT	2019	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	May 14, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.3 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 06/29/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	26.6 Ft.	212 Structure Load Rated	09/19/2017
52 Deck Width	27.6 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Medler, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 51-153-53.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	427	100	427	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	49	100	49	0	0	0	0	0	0
1190/1:Abrasion(PSC/RC)	ft	2	100	2	0	0	0	0	0	0
Notes:1'x 1' area of concrete deterioration at lower SW corner of west abutment. - 5/14/2019										
234/1:Re Conc Pier Cap	ft	49	100	49	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	50	90	45	0	0	10	5	0	0
1080/3:Delamination/Spall/Patched Area	ft	5	0	0	0	0	100	5	0	0
Notes:Bridge rail concrete post have minor spalling with rebar exposed. - 5/14/2019										
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Large scour hole just north of bridge. - 5/14/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:The water channel is filled with riprap. - 5/14/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Concrete surface rub flaking in several locations. Deck and beams replaced with channel beams from 51-153-53.1; that was replaced with precast box. W-beam bridge rails and approach rails also installed. T - E STRESS= 17666 ALLOW= 28000 Year 2017: The water channel is filled with RipRap. Concrete Railing: 2' Delamination on the back of NE curb & 3' spalling on 3 of the bottoms of the rail posts. - 5/14/2019

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Structure Number: 51-153-53.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Major Collector
04 City	SAWYER TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05153 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	OAK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH OF SAWYER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	12.198	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 01' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 04' 48.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	344927.5 5321316.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2008 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	310 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	May 14, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRC-5153(056)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Medler, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
DOUBLE, 12 X 12 X 65' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 51-153-53.1

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-154-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	89.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	MARGARET TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE DEEP CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 3 SOUTH WOLSETH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 24' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 03' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	347560.2 5363658.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 32 59 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	13 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 23, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	35 Ft.	218 Channel Profile	1 48 06/27/2017
49 Structure Length	36.09 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Olson, Medler
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-154-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	289	100	289	0	0	0	0	0	0
206/1:Timber Column	each	12	0	0	100	12	0	0	0	0
1150/1:Check/Shake	each	12	0	0	100	12	0	0	0	0
Notes:Weathered timber - 9/23/2019										
216/1:Timber Abutment	ft	56	0	0	100	56	0	0	0	0
1150/1:Check/Shake	ft	56	0	0	100	56	0	0	0	0
Notes:Weathered timber - 9/23/2019										
235/1:Timber Pier Cap	ft	56	100	56	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	72	100	72	0	0	0	0	0	0
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Deep scour holes along both abutments. Large scour hole just east of structure. - 9/23/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1900/1:Distortion	each	4	0	0	100	4	0	0	0	0
Notes:NW, SW & SE wingwalls are slightly to moderately bowed. Horizontal brace in SE wing is cracked halfway through and brace on SW wing is cracked diagonally. - 9/23/2019										

Remarks: No bridge rails; deck edges marked by concrete curbs. End markers are up. - 9/23/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-154-31.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Major Collector
04 City	MARYLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05153 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	EGG CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	11 EAST 1 SOUTH RUTHVILLE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	37.492	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 21' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 03' 28.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	347571.3 5357638.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 36 65 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 39 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1971 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	115 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 1 1
19 Bypass, Detour Length	2 Miles	113 Scour Critical	3 SC - Unstable
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 14, 2019
32 Approach Roadway Width	27 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	31.8 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 06/27/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	09/19/2017
51 Bridge Rdwy Width - Curb to Curb	32.2 Ft.	213 Federal Aid Project Number	
52 Deck Width	33.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 51-154-31.0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-154-52.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	SAWYER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	OAK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH SAWYER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 02' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 03' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	346565.1 5322479.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	MS 18 (HS 20) (live load for which structure was designated)
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 33 59 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden N	Not Applicable	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1990 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	N Not applicable (NBI)
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	N N 1 1
19 Bypass, Detour Length	2 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 14, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	19.7 Ft.	Other Special	N
48 Length of Max Span	8 Ft.	218 Channel Profile	0
49 Structure Length	32.15 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.
TRIPLE, 8X48' CMP			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-154-52.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/2:Steel Culvert	ft	144	0	0	100	144	0	0	0	0
1000/2:Corrosion	ft	48	0	0	100	48	0	0	0	0
Notes:A few of rivets, holding pipe sections together, are heavily rusted & have been replaced with bolts. Flow line of north pipe is moderately rusted. - 5/14/2019										
1900/2:Distortion	ft	93	0	0	100	93	0	0	0	0
Notes:Tops, of pipes, have deflected downward over four inches, near center line of roadway. - 5/14/2019										
6000/2:Scour	ft	3	0	0	100	3	0	0	0	0
Notes:East end of north pipe undercut over 2'. - 5/14/2019										
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0

Remarks: Voids sounded above pipe seam near center line of roadway. - 5/14/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-154-55.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Major Collector
04 City	Unknown	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05158 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BONNES COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	6 SOUTH SAWYER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	11.198	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 59' 36.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 03' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	346184.5 5317616.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	62 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	37 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	25 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	100 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 14, 2019
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 06/29/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	09/19/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 51-154-55.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	200	93	185	0	0	8	15	0	0
1080/1:Delamination/Spall/Patched Area	ft	11	0	0	0	0	100	11	0	0
Notes:12' long spall on 2nd beam of north channel beam - 5/14/2019										
1090/1:Exposed Rebar	ft	4	0	0	0	0	100	4	0	0
Notes:Spalls developing along bottom of a couple of channel beams with some rebar exposed. - 5/14/2019										
215/1:Re Conc Abutment	ft	49	49	24	51	25	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:1' x 1' spall, in east abutment toward south side, where channel beam bears. - 5/14/2019										
1130/1:Cracking (RC and Other)	ft	48	50	24	50	24	0	0	0	0
Notes:Well defined diagonal crack in NE wing runs from top of wing downward to corner of abutment, then horizontally across at mid-elevation of abutment. - 5/14/2019										
331/1:Re Conc Bridge Railing	ft	49	88	43	0	0	12	6	0	0
1090/1:Exposed Rebar	ft	6	0	0	0	0	100	6	0	0
Notes:End broke off curb in NE corner. Several vertical spalls with rebar exposed on north curb. - 5/14/2019										
332/1:Timb Bridge Railing	ft	50	100	50	0	0	0	0	0	0
Notes:2"x 6" railing with 4- 4"x 4" posts per side - 5/14/2019										
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1130/1:Cracking (RC and Other)	each	3	100	3	0	0	0	0	0	0
Notes:Minor hairline cracking - 5/14/2019										
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Shallow scour along wins and abutments - 5/14/2019										

Remarks: Wing walls are very short. Approach embankment is eroding at bridge corners as slope is 1:1 so it will tie in with wings. - 5/14/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-155-35.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	MARYLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	HAY COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	4 EAST 4 NORTH SURREY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 17' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 02' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	348994.5 5350988.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 38 68 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 41 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 14, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	24 Ft.	218 Channel Profile	1 48 06/27/2017
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	1.0 Ft Lt-Side	212 Structure Load Rated	09/19/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-155-35.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/1:Re Conc Opn Girder/Beam	ft	200	100	200	0	0	0	0	0	0
206/1:Timber Column	each	14	0	0	100	14	0	0	0	0
1150/1:Check/Shake	each	14	0	0	100	14	0	0	0	0
216/1:Timber Abutment	ft	52	0	0	100	52	0	0	0	0
1150/1:Check/Shake	ft	51	0	0	100	51	0	0	0	0
Notes:Timber abutments and wings show moderate weathering. - 5/14/2019										
7000/1:Damage	ft	1	0	0	100	1	0	0	0	0
Notes:Horizontal brace on south abutment split on west end from debris damage. - 5/14/2019										
235/1:Timber Pier Cap	ft	52	0	0	100	52	0	0	0	0
1150/1:Check/Shake	ft	51	0	0	100	51	0	0	0	0
1900/1:Distortion	ft	1	0	0	100	1	0	0	0	0
Notes:South abutment cap leaning towards channel. - 5/14/2019										
331/1:Re Conc Bridge Railing	ft	49	100	49	0	0	0	0	0	0
332/1:Timb Bridge Railing	ft	49	0	0	0	100	49	0	0	0
1150/1:Check/Shake	ft	49	0	0	0	100	49	0	0	0
6000/1:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Large, deep scour hole under & to east of structure. - 5/14/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1150/1:Check/Shake	each	4	0	0	100	4	0	0	0	0
Notes:Timber abutments and wings show moderate weathering. Centers decaying in most wing wall piling. - 5/14/2019										

Remarks: Small, yellow end markers obscured by tall grass. -5/14/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-155-49.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Major Collector
04 City	SAWYER CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05153 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SOURIS RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	CITY OF SAWYER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	18.796	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 05' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 03' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	347328.3 5328876.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 48 87 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 19 35 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	25 Tons
27 Yr Built	1978 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	150 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	April 11, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	60 Ft.	Other Special	N
49 Structure Length	149.93 Ft.	218 Channel Profile	1 48 07/05/2017
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	Chaining Date	None
	0.7 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	27.9 Ft.	213 Federal Aid Project Number	ROS-5153(51)
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Lawson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 51-155-49.0

Element / Env. / Description		Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck		sq.ft	4,500	85	3,844	15	656	0	0	0	0
Notes:Some efflorescence evident along random hairline cracks in deck. Deck surface also has minor amount of pop-outs. Cracking in deck where some of the bridge rail post are attached. - 4/11/2019											
1080/1:Delamination/Spall/Patched Area		sq.ft	56	0	0	100	56	0	0	0	0
Notes:A 4'x 10' spall on deck surface. 2' x 8' spall on east deck edge, near mid point of Span 2, where bridge rail post is fastened. - 4/11/2019											
1190/1:Abrasion(PSC/RC)		sq.ft	600	0	0	100	600	0	0	0	0
Notes:20' of the North end has abrasion. - 4/11/2019											
104/1:Pre Cld Box Girder		ft	600	99	596	1	4	0	0	0	0
1080/1:Delamination/Spall/Patched Area		ft	4	0	0	100	4	0	0	0	0
Notes:Bottoms of the outside beams in Span One have a couple of small spalls with rebar exposed. Bottom of middle diaphragms in Span Three has two small spalls. - 4/11/2019											
210/1:Re Conc Pier Wall		ft	59	93	55	7	4	0	0	0	0
1080/1:Delamination/Spall/Patched Area		ft	59	93	55	7	4	0	0	0	0
Notes:Small honeycomb areas on west end of pier two and east end of pier three. A two foot long spall on east beam in span 1, reinforced cable is exposed. - 4/11/2019											
215/1:Re Conc Abutment		ft	59	100	59	0	0	0	0	0	0
1130/1:Cracking (RC and Other)		ft	59	100	59	0	0	0	0	0	0
Notes:0.08 to o.30 MM horizontal cracks in both abutment. - 4/11/2019											
330/1:Metal Bridge Railing		ft	299	100	299	0	0	0	0	0	0
515/1:Steel Protective Coating		sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing		ft	299	100	299	0	0	0	0	0	0
1130/1:Cracking (RC and Other)		ft	299	100	299	0	0	0	0	0	0
Notes:Both curbs have minor cracking. - 4/11/2019											
8401/1:Wings		each	4	100	4	0	0	0	0	0	0
Notes:SE wing wall has minor spalls. - 4/11/2019											

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-155-50.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	39.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	SAWYER TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH SAWYER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 04' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 03' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	346945.8 5326135.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 9 16 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 6 11 Tons
Dk Protect	None	70 Bridge Posting	0 >39.9% below
208 Dk Overburden	1 None	209 Posted in "Tons"	16 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 14, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	20 Ft.	218 Channel Profile	1 48 06/29/2017
49 Structure Length	21.00 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 51-155-50.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	484	60	292	40	192	0	0	0	0
1150/1:Check/Shake	sq.ft	192	0	0	100	192	0	0	0	0
Notes:Timber elements weathered - 5/14/2019										
111/1:Timber Open Girder	ft	272	0	0	100	272	0	0	0	0
Notes:Wood diaphragms, at mid-span, are missing and/or pulled loose. - 5/14/2019										
1150/1:Check/Shake	ft	251	0	0	100	251	0	0	0	0
1160/1:Crack (Timber)	ft	21	0	0	100	21	0	0	0	0
Notes:One center girder cracked and repaired with u-clamps. - 5/14/2019										
206/1:Timber Column	each	10	0	0	100	10	0	0	0	0
1150/1:Check/Shake	each	10	0	0	100	10	0	0	0	0
Notes:Timber elements weathered - 5/14/2019										
216/1:Timber Abutment	ft	49	0	0	100	49	0	0	0	0
1140/1:Decay/Section Loss	ft	24	0	0	100	24	0	0	0	0
Notes:Center beginning to decay in east piling of south abutment. - 5/14/2019										
1150/1:Check/Shake	ft	25	0	0	100	25	0	0	0	0
235/1:Timber Pier Cap	ft	49	0	0	100	49	0	0	0	0
Notes:Heavy build-up of dirt on abutment caps. - 5/14/2019										
1150/1:Check/Shake	ft	25	0	0	100	25	0	0	0	0
Notes:Several weather checks in abutment caps - 5/14/2019										
1900/1:Distortion	ft	24	0	0	100	24	0	0	0	0
Notes:South abutment cap slightly tipped. South abutment cap sitting on back edge of east piling. Both abutments beginning to bow inward. - 5/14/2019										
8401/1:Wings	each	4	0	0	100	4	0	0	0	0
1140/1:Decay/Section Loss	each	2	0	0	100	2	0	0	0	0
Notes:Centers decaying in wing wall piling. - 5/14/2019										
1900/1:Distortion	each	2	0	0	100	2	0	0	0	0
Notes:Large void behind NW wing- animal burrow - 5/14/2019										

Remarks: 4" x 4" timbers mark deck edge. - 5/14/2019

Alert Code 1: Bridge rails missing. From the north 5,11,14, and 19 have deep weathered checks and/or moderate longitudinal cracking or splintering. Hole in NW wing. - 5/14/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 51-156-49.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	55.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	SAWYER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MOUSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST OF SAWYER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 05' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 00' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	349975.6 5328180.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	6 Corrugated Steel	64 Oper. Rating	HS 12 21 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 7 14 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	24 Gravel/Dirt	209 Posted in "Tons"	21 Tons
Age and Service		Appraisal	
27 Yr Built	1940 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	2 Intolerable - Replace
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	5 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	16 Ft. 8 In.	90 Date of Last Inspection	April 24, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 05/01/2017
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.4 Ft.	Other Special	N
48 Length of Max Span	128 Ft.	218 Channel Profile	1 48 07/05/2017
49 Structure Length	132.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.7 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	13 Ft. 8 In.	216 Inspector	Medler, Devries, Lawson, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 51-156-49.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
30/1:Steel Deck - Orthotropic	sq.ft	2,357	100	2,351	0	0	0	6	0	0
Notes:Minor sagging of corrugated decking between all floor beams. - 4/24/2019										
7000/1:Damage	sq.ft	6	0	0	0	0	100	6	0	0
Notes:Three small holes thru corrugated metal deck, two on east side one on west side. Blade damaged decking, midway on west side along edge. - 4/24/2019										
510/1:Wearing Surfaces	sq.ft	2,357	100	2,357	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
113/1:Steel Stringer	ft	932	0	0	100	932	0	0	0	0
1000/1:Corrosion	ft	812	0	0	100	812	0	0	0	0
Notes:Surface rust - 4/24/2019										
1900/1:Distortion	ft	120	0	0	100	120	0	0	0	0
Notes:-A several I-beam girders have minor bowing; mostly in the downstream direction. - 4/24/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
120/1:Steel Truss	ft	258	93	240	4	10	3	8	0	0
1020/1:Connection	ft	8	0	0	0	0	100	8	0	0
Notes:Roller bearing assembly's under truss end posts are filled with debris and frozen with rust. - 4/24/2019										
1900/1:Distortion	ft	10	0	0	100	10	0	0	0	0
Notes:2nd vertical Lt has 2 kinks by bridge rail. There is a noticeable kink in lower flange of upper chord next to 1st vertical on both sides of bridge. - 4/24/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
152/1:Steel Floor Beam	ft	98	0	0	98	96	2	2	0	0
1000/1:Corrosion	ft	96	0	0	100	96	0	0	0	0
Notes:Surface rust - 4/24/2019										
1020/1:Connection	ft	2	0	0	0	0	100	2	0	0
Notes:End broke off diagonal that attaches to 4th floor beam, lt. One lower lateral brace broken between floor beams 1 and 2. It has broken free on the east side of the floor beam and caused a 1.5 inch tear in top corner - 4/24/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
215/1:Re Conc Abutment	ft	36	100	36	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	266	85	226	15	40	0	0	0	0
7000/1:Damage	ft	40	0	0	100	40	0	0	0	0
Notes:Bridge rail bent in several places from traffic collision. - 4/24/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: SW marker missing. - 4/24/2019 - 8/15/2019 - Load Postings were installed Aug 15th, 2019. cta

Alert Code 1: 0.20 to 0.40 mm grooves wore into lower chords where they are in contact with angle iron bridge rail posts. - 4/24/2019

Alert Code 2: Nut is missing from lower pin point connection (outside) of third vertical on Lt side.- 2019-Repair made by replacing the nut which was also welded on. - 4/24/2019

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Structure Number: 51-156-54.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Minot District	22 Owner	County Hwy Agency
03 County	Ward	26 Functional	Rural, Local
04 City	BRILLIAN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BONNES COULEE	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 5 SOUTH SAWYER	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 00' 47.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 00' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	349820.9 5319713.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1994 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	May 14, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	10 Ft.	Other Special	N
49 Structure Length	21.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DPI-0036(001)511
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Medler, Olson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 10X5X64' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Structure Number: 51-156-54.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/2:Re Conc Culvert Precast	ft	128	97	124	3	4	0	0	0	0
1130/2:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:11/2010 - Minor cracks through parapets at both ends of box. South barrel has minor cracking. - 5/14/2019										
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: MNOT01

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	68.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Minot District	22 Owner	City/Municipal Hwy Agenc
03 County	Ward	26 Functional	Urban, Minor Arterial
04 City	MINOT CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 6 Business 08945 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MOUSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3RD AVE-10TH ST NW-MINOT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.870	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 328504.6 5345429.1		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	5	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 28
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 14
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden 33	Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built 1976 106 Yr Reconstructed		67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	2 Intolerable - Replace
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	4	71 Waterway Adequacy	8 Equal Desirable
29 ADT 9,200 30 Year of ADT 2019		72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	1.00	36 Traffic Safety Features	1 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	3 SC - Unstable
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 21, 2019
32 Approach Roadway Width	52 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	14.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	48.2 Ft.	Other Special	N
48 Length of Max Span	47 Ft.	218 Channel Profile	— -1
49 Structure Length	169.95 Ft.	Chaining Date	01/01/1901
50 Curb/Sidewalk Widths	4.6 Ft Rt-Side	207 Transporter Erector Routes and Sites	None
	4.6 Ft Lt-Side	212 Structure Load Rated	-1
51 Bridge Rdwy Width - Curb to Curb		213 Federal Aid Project Number	01/01/1901
	48.6 Ft.	214 Delayed Inspection	ER-151(4)C#1
52 Deck Width	59.4 Ft.	216 Inspector	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.		Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: MNOT01

[illegible]

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: MNOT03

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	77.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Minot District	22 Owner	City/Municipal Hwy Agenc
03 County	Ward	26 Functional	Urban, Minor Arterial
04 City	MINOT CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 6 Business 08928 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MOUSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	16TH ST SW-MINOT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.100	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 328035.7 5344278.9		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	—	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 51
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 23
208 Dk Overburden	1	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1979 106 Yr Reconstructed		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	4 Tolerable
28 Lanes on Structure	4	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 12,800 30 Year of ADT 2019		71 Waterway Adequacy	4 Tolerable
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	51 Ft.	90 Date of Last Inspection	October 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	50.9 Ft.	Underwater	N
48 Length of Max Span	43 Ft.	Other Special	N
49 Structure Length	136.15 Ft.	218 Channel Profile	— -1
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	8.9 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	50.9 Ft.	213 Federal Aid Project Number	M-MG-4-989(00)004
52 Deck Width	62.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: MNOT03

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	6,932	0	0	100	6,932	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	1	0	0	100	1	0	0	0	0
Notes:Small spall on deck 20 feet from south end and 8 feet from west barrier. - 10/25/2019										
1130/1:Cracking (RC and Other)	sq.ft	2,800	0	0	100	2,800	0	0	0	0
Notes:Transverse hairline cracks in the deck with efflorescence showing on underside. - 10/25/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	4,131	0	0	100	4,131	0	0	0	0
Notes:-Deck moderately scaled adjacent to jersey barriers on both sides. Numerous pop outs on deck surface. - 10/25/2019										
104/1:Pre Clsd Box Girder	ft	932	100	932	0	0	0	0	0	0
Notes:Beam 3, span 1, has minor spalls on east face towards top. - 10/25/2019										
210/1:Re Conc Pier Wall	ft	115	97	112	3	3	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:Pier two has one foot square spall under second beam from west, on south side. Small spall on top east end of Pier 3 adjacent to outside beam. - 10/25/2019										
215/1:Re Conc Abutment	ft	125	84	105	16	20	0	0	0	0
1130/1:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
Notes:-North abutment has vertical cracks with efflorescence. - 10/25/2019										
321/1:Re Conc Approach Slab	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	272	0	0	100	272	0	0	0	0
1090/1:Exposed Rebar	ft	50	0	0	100	50	0	0	0	0
Notes:Numerous small vertical spalls on face of jersey barriers entire length of bridge; short sections of rebar exposed with section loss. - 10/25/2019										
1190/1:Abrasion(PSC/RC)	ft	222	0	0	100	222	0	0	0	0
Notes:Heavy abrasion all along base of barriers. - 10/25/2019										
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
2210/1:Movement	each	2	0	0	100	2	0	0	0	0
Notes:Riprap displaced. Rip rap slope protection has been scattered and much of the slope has no protection at all - 10/25/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Alert Code 1: 1ft of north abutment exposed and undermined 2 feet with wood piling exposed. - 10/25/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: MNOT05

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Minot District	22 Owner	City/Municipal Hwy Agenc
03 County	Ward	26 Functional	Urban, Minor Arterial
04 City	MINOT CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 6 Business 08955 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MOUSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2ND AVE-10TH ST SW-MINOT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.400	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 328532.9 5344952.3		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 33
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 19
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden 303	Asphalt	209 Posted in "Tons"	20 Tons
Age and Service		Appraisal	
27 Yr Built 1968 106 Yr Reconstructed		67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	4 Tolerable
29 ADT 4,600 30 Year of ADT 2019		72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	2.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	1 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 26, 2019
32 Approach Roadway Width	40 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	39.7 Ft.	Other Special	N
48 Length of Max Span	58 Ft.	218 Channel Profile	1 48
49 Structure Length	145.01 Ft.	Chaining Date	06/26/2019
50 Curb/Sidewalk Widths	5.9 Ft Rt-Side	207 Transporter Erector Routes and Sites	None
	5.9 Ft Lt-Side	212 Structure Load Rated	11/01/2019
51 Bridge Rdwy Width - Curb to Curb	40.0 Ft.	213 Federal Aid Project Number	SEC 23 TWP 155N RGE 83W
52 Deck Width	51.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: MNOT05

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	2,464	94	2,303	7	161	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	12	0	0	100	12	0	0	0	0
Notes:Outside beams have a few small spalls. - 9/26/2019										
1090/1:Exposed Rebar	ft	4	0	0	100	4	0	0	0	0
Notes:-3 foot spall with rebar exposed in span 2 along bottom of 3rd beam from north ,center span. -Span 3. beam 2 has 1 foot spall with exposed rebar. - 9/26/2019										
1110/1:Cracking (PSC)	ft	145	0	0	100	145	0	0	0	0
Notes:There are several 0.30 mm longitudinal cracks on vertical face of north outside beams of original structure and widening. - 9/26/2019										
210/1:Re Conc Pier Wall	ft	75	53	40	47	35	0	0	0	0
215/1:Re Conc Abutment	ft	105	97	102	3	3	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:Small spalls in precast panels in west abutment towards south end. - 9/26/2019										
234/1:Re Conc Pier Cap	ft	105	84	88	11	12	5	5	0	0
1090/1:Exposed Rebar	ft	5	0	0	0	0	100	5	0	0
Notes:Shallow spall with exposed rebar on west side of Pier 3 hammerhead at north end. - 9/26/2019										
1130/1:Cracking (RC and Other)	ft	12	0	0	100	12	0	0	0	0
Notes:Diagonal 0.20 to 0.50 mm crack at outer north end of Pier 3; in hammer head portion. At south end of Pier 3, there is 0.40 mm crack that starts by second beam and runs diagonally down to south to outer edge. - 9/26/2019										
330/1:Metal Bridge Railing	ft	315	0	0	100	315	0	0	0	0
1000/1:Corrosion	ft	315	0	0	100	315	0	0	0	0
Notes:Covered in surface rust. - 9/26/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	0	0	0	0	100	2	0	0
2210/1:Movement	each	2	0	0	0	0	100	2	0	0
Notes:Displaced - 9/26/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Sidewalk has a few spall location from 1 -11 feet long. - 9/26/2019**Alert Code 1:** NE wing wall footing expsed and undermined 2 feet. - 9/26/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: MNOT09

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	73.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Minot District	22 Owner	City/Municipal Hwy Agenc
03 County	Ward	26 Functional	Urban, Minor Arterial
04 City	MINOT CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 6 Business 08945 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MOUSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3RD AVE-4TH ST NW-MINOT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	2.400	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 329329.2 5345471.0		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	5	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 30
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 16
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden 32	Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built 1977 106 Yr Reconstructed		67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	2 Intolerable - Replace
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	4	71 Waterway Adequacy	8 Equal Desirable
29 ADT 8,400 30 Year of ADT 2019		72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	1.00	36 Traffic Safety Features	1 0 0 0
19 Bypass, Detour Length	1 Miles	113 Scour Critical	3 SC - Unstable
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 07, 2019
32 Approach Roadway Width	48 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	30.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	47.9 Ft.	Other Special	N
48 Length of Max Span	46 Ft.	218 Channel Profile	— -1
49 Structure Length	174.87 Ft.	Chaining Date	01/01/1901
50 Curb/Sidewalk Widths	4.6 Ft Rt-Side	207 Transporter Erector Routes and Sites	None
	4.9 Ft Lt-Side	212 Structure Load Rated	-1
51 Bridge Rdwy Width - Curb to Curb		213 Federal Aid Project Number	01/01/1901
	48.2 Ft.	214 Delayed Inspection	ER-151(4) C#2
52 Deck Width	66.9 Ft.	216 Inspector	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.		Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: MNOT09

[illegible]

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: MNOT10

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	62.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Minot District	22 Owner	City/Municipal Hwy Agenc
03 County	Ward	26 Functional	Urban, Minor Arterial
04 City	MINOT CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 6 Business 08950 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect 4TH AVE BNRR SOURIS R.		102 Direction of Traffic	2 2-way traffic
09 Location	3RD ST NE-MINOT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.300	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 330084.8 5345430.8		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel continuous	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	11	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type 1 Concrete-Cast-in-Place		64 Oper. Rating HS 41	74 Tons
108 Wearing Surface 1 Monolithic Concrete		65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating HS 20	37 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden 1	None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built 1936 106 Yr Reconstructed 1985		67 Structural Condition	5 Above Min Tolerable
42 Type of Service 5 Highway-pedestrian - On		68 Deck Geometry	4 Tolerable
8 Hwy-waterway-RR - Under		69 Underclear. Vert & Horiz	3 Intolerable - Correct
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT 9,000 30 Year of ADT 2019		72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	1.00	36 Traffic Safety Features	1 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 04, 2019
32 Approach Roadway Width	29 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.9 Ft.	Other Special	N
48 Length of Max Span	117 Ft.	218 Channel Profile	1 48 06/26/2019
49 Structure Length	912.07 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	6.6 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb		213 Federal Aid Project Number	BRM-4-989(14)012
	28.9 Ft.	214 Delayed Inspection	Not Applicable
52 Deck Width	38.1 Ft.	216 Inspector	Medler, Olson
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	Navigation Data	
54 Min Vert Underclearance	15 Ft. 0 In.	38 Navigation Control	Permit Not Required
	H Hwy beneath struct	39 Navigation Vertical Clearance	0 Ft.
55 Min Lateral UnderClear. - Rt	3.6 Ft.	40 Navigation Horizontal Clearance	0 Ft.
	H Hwy beneath struct	111 Pier or Abutment Protection	Unknown (NBI)
56 Min Lateral UnderClear. - Lt	3.6 Ft.	116 Minimum Navigation Vertical Clearance	-1 Ft.
210 Culvert / 211 Description			

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SEC 409

Structure Number: MNOT10

Structure Number: MNOT10

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	26,447	63	16,662	37	9,775	0	10	0	0
1090/1:Exposed Rebar	sq.ft	10	0	0	0	0	100	10	0	0
Notes:Moderate to severe deterioration of concrete in soffit of deck adjacent to first expansion assembly from S end. Rebar has 50% section loss. Span 1: Diaphragms have spalls w/ rebar exposed and loss of section. - 11/4/2019										
1130/1:Cracking (RC and Other)	sq.ft	9,775	0	0	100	9,775	0	0	0	0
Notes:Map cracking in deck. Efflorescence showing. - 11/4/2019										
510/1:Wearing Surfaces	sq.ft	16,651	100	16,651	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	4,551	94	4,281	0	20	6	250	0	0
1020/1:Connection	ft	250	0	0	0	0	100	250	0	0
Notes:Pack rust at connections in bracing and gussets most prevalent under open joints. Span 3: 1 metal cross brace bent. Pier 9- Gusset plate on outside of E girder, under expansion assembly is cracked in 2. Span 9- 2 diaphragms slightly bent. - 11/4/2019										
2220/1:Alignment	ft	20	0	0	100	20	0	0	0	0
Notes:Span 9: Small gouge in bottom flange of E outside girder. Flange also bent a couple inches to W. - 11/4/2019										
515/1:Steel Protective Coating	sq.ft	100	50	50	25	25	25	25	0	0
3440/1:Eff (Stl Protect Coat)	sq.ft	100	50	50	25	25	25	25	0	0
205/1:Re Conc Column	each	20	70	14	30	6	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	5	0	0	100	5	0	0	0	0
Notes:Pier 8: 1'x4" spall on NW corner of E column. - 11/4/2019										
1090/1:Exposed Rebar	each	1	0	0	100	1	0	0	0	0
215/1:Re Conc Abutment	ft	89	75	67	23	20	2	2	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
Notes:Spall in South abut. - 11/4/2019										
1130/1:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
Notes:Abut. 1- NE corner has map cracking. - 11/4/2019										
234/1:Re Conc Pier Cap	ft	331	75	249	24	79	1	3	0	0
1080/1:Delamination/Spall/Patched Area	ft	75	0	0	100	75	0	0	0	0
Notes:Pier 4: Several spalls and delamination of cap and columns. Pier 5: Sides of cap are lightly scaled. Bottom of cap is cracked and delaminated. Pier 6: Bottom NE corner of cap is spalled. Pier 7: Top east end of cap spalled and deteriorating. Pier 8- East side has a few small to large spalls. Pier 10- East side pier cap is crushing under girder 5. Cap is spalling and map cracking on the east side. - 11/4/2019										
1090/1:Exposed Rebar	ft	4	0	0	100	4	0	0	0	0
Notes:Pier 2: spalls with rebar exposed. - 11/4/2019										
1130/1:Cracking (RC and Other)	ft	3	0	0	0	0	100	3	0	0
Notes:Pier 3: Masonry pad, under 2nd girder, has large crack and moderate deterioration. Pier 8- Bottom of pier cap has moderate cracking and deterioration. - 11/4/2019										
300/1:Strip Seal Exp Joint	ft	190	0	0	37	70	47	90	16	30
2330/1:Seal Damage	ft	190	0	0	37	70	47	90	16	30
311/1:Moveable Bearing	each	60	63	38	0	0	37	22	0	0
1000/1:Corrosion	each	22	0	0	0	0	100	22	0	0
Notes:Abut 1: Bearing plate, under roller for 2nd girder from the W, destroyed by rust. Plate under E outside roller is moderately rusted and bent on either side of roller. Plates under Pier 2 and South abutment badly rusted. - 11/4/2019										

Structure Number: MNOT10

515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
313/1:Fixed Bearing	each	40	0	0	100	40	0	0	0	0
1000/1:Corrosion	each	40	0	0	100	40	0	0	0	0
Notes:Heavy rust. - 11/4/2019										
515/1:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
321/1:Re Conc Approach Slab	sq.ft	100	0	0	100	100	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:North approach slab cracked throughout. - 11/4/2019										
330/1:Metal Bridge Railing	ft	2,040	49	989	50	1,020	0	0	2	31
1000/1:Corrosion	ft	1,020	0	0	100	1,020	0	0	0	0
Notes:Surface rusted. - 11/4/2019										
7000/1:Damage	ft	31	0	0	0	0	0	0	100	31
Notes:31 ft. of railing is missing at the south end. - 11/4/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	1,821	0	0	100	1,821	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	25	0	0	100	25	0	0	0	0
1090/1:Exposed Rebar	ft	17	0	0	100	17	0	0	0	0
1190/1:Abrasion(PSC/RC)	ft	1,779	0	0	100	1,779	0	0	0	0
Notes:There is abrasion throughout the entire structure. - 11/4/2019										
1080/1:Delamination/Spall/Patched Area	each	327	99	324	0	0	0	0	1	3
7357/1:Pack Rust	each	1	100	1	0	0	0	0	0	0
Notes:Pack rust on end flanges of span 3 girder 5. Pier 10: Bearing plates for girders are moderately pack rusted. Pier 11: Bearing plate under W outside girder is moderately pack rusted. Numerous areas of pack rust under the joints in deck. East side - 11/4/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	2	100	2	0	0	0	0	0	0

Remarks: Span 6: 4 sections of exposed rebar along east soffit. Span 8: E soffit has 1'x0.5' spall w/ rebar exposed. Span 9- W edge of soffit has spall w/ rebar exposed. Between beams 1 and 2 on bottom of deck there is a 3'x1' spall w/ rebar exposed. - 11/4/2019

Alert Code 2: Partial failure of some of the new expansion assembly seals is allowing deicing salts to drip onto pier caps and metal diaphragms. Small holes rusted through lateral brace gusset plates at several locations. Repair, of deteriorated concrete at top east end of Pier 9, is failing. - 11/4/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: MNOT15

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Minot District	22 Owner	City/Municipal Hwy Agenc
03 County	Ward	26 Functional	Urban, Minor Arterial
04 City	MINOT CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 6 Business 08945 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MOUSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4TH AVE-16TH ST NW-MINOT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.500	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 14' 24.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 18' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 328024.2 5345575.2		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 49
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 20
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2016	Appraisal	
106 Yr Reconstructed		67 Structural Condition	9 Above Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	4	71 Waterway Adequacy	9 Above Desirable
29 ADT	7,850	72 App. Rdwy. Alignment	8 Equal Desirable Crit
30 Year of ADT	2019	36 Traffic Safety Features	1 1 1 1
109 Average Daily Truck Traffic	1.00	113 Scour Critical	8 Stable Above Footing
19 Bypass, Detour Length	2 Miles		
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 07, 2019
32 Approach Roadway Width	48 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	51.0 Ft.	Other Special	N
48 Length of Max Span	90 Ft.	218 Channel Profile	—
49 Structure Length	90.00 Ft.	Chaining Date	01/01/1901
50 Curb/Sidewalk Widths	10.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	None
	6.0 Ft Lt-Side	212 Structure Load Rated	07/27/2016
51 Bridge Rdwy Width - Curb to Curb	51.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	71.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: MNOT15

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	6,420	97	6,221	3	199	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	6,420	97	6,221	3	199	0	0	0	0
Notes:Several large transverse cracks in deck, with efflorescence showing through the bottom. - 10/7/2019										
109/1:Pre Opn Conc Girder/Beam	ft	720	100	720	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	155	100	155	0	0	0	0	0	0
313/3:Fixed Bearing	each	16	100	16	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	180	100	180	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Approach sidewalks have settled 1". - 10/7/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: MNOT17

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Minot District	22 Owner	City/Municipal Hwy Agenc
03 County	Ward	26 Functional	Urban, Minor Arterial
04 City	MINOT CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 6 Business 08969 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MOUSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	8TH AVE SE-MINOT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.300	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 331543.4 5344255.1		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type :stressed concrete continuous		61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type 1 Concrete-Cast-in-Place		63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface 1 Monolithic Concrete		64 Oper. Rating HS 55	99 Tons
Membrane 0 None		65 Inventory Rating Method	1 LF Load Factor
Dk Protect 1 Epoxy Coated Reinforci		66 Inv. Rating HS 20	38 Tons
208 Dk Overburden 1	None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1993 106 Yr Reconstructed		Appraisal	
42 Type of Service 1 Highway - On		67 Structural Condition	8 Equal Desirable Crit
5 Waterway - Under		68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure 2		69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 3,000 30 Year of ADT 2019		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic 2.00		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length 2 Miles		36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance 99 Ft. 12 In.		Inspections	
32 Approach Roadway Width 35 Ft.		90 Date of Last Inspection	September 26, 2019
33 Bridge Median 0 No median		91 Designated Inspection Frequency	24 Months
34 Skew 20.00		92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared 0 No flare		Fracture Critical N	
47 Total Horizontal Clearance 34.8 Ft.		Underwater N	
48 Length of Max Span 58 Ft.		Other Special N	
49 Structure Length 166.01 Ft.		218 Channel Profile — -1	01/01/1901
50 Curb/Sidewalk Widths 5.6 Ft Rt-Side		Chaining Date	None
5.6 Ft Lt-Side		207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb 35.1 Ft.		212 Structure Load Rated	01/01/1901
52 Deck Width 49.5 Ft.		213 Federal Aid Project Number	BRU-4-989(022)023
53 Min Vert Clear. Over Bridge 99 Ft. 12 In.		214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance 0 Ft. 0 In.		216 Inspector	Medler, Olson
N Feature not hwy or RR		Navigation Data	
55 Min Lateral UnderClear. - Rt 99.9 Ft.		38 Navigation Control	Permit Not Required
N Feature not hwy or RR		39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt 0.0 Ft.		40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: MNOT17

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	5,813	98	5,713	2	100	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	100	0	0	100	100	0	0	0	0
Notes:.6 mm diagonal cracks through deck with light efflorescence. - 9/26/2019										
520/1:Conc Re Prot Sys	sq.ft	5,813	100	5,813	0	0	0	0	0	0
104/1:Pre Clsd Box Girder	ft	968	100	968	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	95	100	95	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	108	100	108	0	0	0	0	0	0
Notes:-Construction joints, in both abutment, have moderate seepage and efflorescence. - 9/26/2019										
330/1:Metal Bridge Railing	ft	331	100	331	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	331	0	0	100	331	0	0	0	0
1090/1:Exposed Rebar	ft	15	0	0	100	15	0	0	0	0
Notes:-Short vertical spalls on face of jersey barriers; a few small sections of rebar exposed. - 9/26/2019										
1190/1:Abrasion(PSC/RC)	ft	316	0	0	100	316	0	0	0	0
Notes:Moderate abrasion covers barriers - 9/26/2019										
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
2210/1:Movement	each	2	0	0	100	2	0	0	0	0
Notes:Displaced - 9/26/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Alert Code 1: Approach side walks have settled 4 to 6 inches causing a trip hazard - 9/26/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: MNOT21

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Minot District	22 Owner	City/Municipal Hwy Agenc
03 County	Ward	26 Functional	Urban, Minor Arterial
04 City	MINOT CITY	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline	08956 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MOUSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	27TH ST SE-MINOT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.800	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	332690.4 5343973.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 55 99 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 35 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	33 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1950	67 Structural Condition	7 Above Min Criteria
106 Yr Reconstructed		68 Deck Geometry	4 Tolerable
42 Type of Service	1 Highway - On	69 Underclear. Vert & Horiz	N Not applicable (NBI)
	5 Waterway - Under	71 Waterway Adequacy	8 Equal Desirable
28 Lanes on Structure	2	72 App. Rdwy. Alignment	8 Equal Desirable Crit
29 ADT	4,800	36 Traffic Safety Features	0 0 0 0
30 Year of ADT	2019	113 Scour Critical	U Unknown Scour
109 Average Daily Truck Traffic	2.00		
19 Bypass, Detour Length	3 Miles		
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 26, 2019
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	30.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	33.5 Ft.	Other Special	N
48 Length of Max Span	58 Ft.	218 Channel Profile	— -1 01/01/1901
49 Structure Length	180.12 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	5.9 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	5.9 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb		213 Federal Aid Project Number	CS-795(6)_
	33.5 Ft.	214 Delayed Inspection	Not Applicable
52 Deck Width	45.6 Ft.	216 Inspector	Medler, Olson
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	Navigation Data	
54 Min Vert Underclearance	0 Ft. 0 In.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
55 Min Lateral UnderClear. - Rt	99.9 Ft.	40 Navigation Horizontal Clearance	0 Ft.
	N Feature not hwy or RR	111 Pier or Abutment Protection	Unknown (NBI)
56 Min Lateral UnderClear. - Lt	0.0 Ft.	116 Minimum Navigation Vertical Clearance	-1 Ft.
210 Culvert / 211 Description			

Structure Number: MN0T21

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	6,028	94	5,660	6	368	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	368	0	0	100	368	0	0	0	0
Notes:Now covered by chip seal - 9/26/2019										
104/1:Pre Clsd Box Girder	ft	2,700	99	2,666	1	25	0	9	0	0
1080/1:Delamination/Spall/Patched Area	ft	20	0	0	100	20	0	0	0	0
Notes:Small spalls, in east outside box beam, under rail posts 9 & 10, from south end. - 9/26/2019										
1090/1:Exposed Rebar	ft	14	0	0	36	5	64	9	0	0
Notes:Beam 14 has 3 sections of rebar exposed at in span 2 - 9/26/2019										
210/1:Re Conc Pier Wall	ft	75	0	0	100	75	0	0	0	0
1190/1:Abrasion(PSC/RC)	ft	75	0	0	100	75	0	0	0	0
Notes:Minor deterioration of concrete on piers below high water line. - 9/26/2019										
215/1:Re Conc Abutment	ft	105	98	103	0	0	2	2	0	0
Notes:Areas of poorly consolidated concrete in buttress walls for south abutment. - 9/26/2019										
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
Notes:1'x2' spall missing in top inner corner of NE wing. 1st box beam, span 2 has a 4' spall by rail post. - 9/26/2019										
234/1:Re Conc Pier Cap	ft	108	82	88	0	0	19	20	0	0
1080/1:Delamination/Spall/Patched Area	ft	20	0	0	0	0	100	20	0	0
Notes:-Top of Pier 3 has moderate spalls under beams 11 through 13. -Top of Pier 2 has small spalls under third beam from the west. 2'x2' spall developing on north side of Pier two, at the east end. -Tops of pier caps beginning to scale. - 9/26/2019										
330/1:Metal Bridge Railing	ft	361	0	0	100	361	0	0	0	0
1000/1:Corrosion	ft	361	0	0	100	361	0	0	0	0
Notes:Surface rusted - 9/26/2019										
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	361	50	180	50	181	0	0	0	0
1190/1:Abrasion(PSC/RC)	ft	181	0	0	100	181	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
2210/1:Movement	each	2	0	0	100	2	0	0	0	0
Notes:Displaced - 9/26/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: -Water seeping through backwall & bridge seat cold joint of Abut. 4. -Water seeping between 2nd and 3rd and 4th beams, from east side of bridge. -Numerous spalls with rebar exposed & loss of section in beam 2, span 3, of west sidewalk. -2nd box beam in sidewalk, span 1 & 2, have 6"x6" spall with cable exposed, top side of beam. - 9/26/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: MNOT22 B

200 System Designation	4 - Urban	Classification	
201 Status		12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	-2.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Minot District	22 Owner	City/Municipal Hwy Agenc
03 County	Ward	26 Functional	Urban, Minor Arterial
04 City	MINOT CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	One Route Under	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 6 Business 08928 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	16 ST. S.W.	102 Direction of Traffic	2 2-way traffic
09 Location	16TH ST SW-MINOT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.200	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Unknown
16 Latitude	48d 13' 38.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 18' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 328164.7 5344155.5		Condition	
98 Border Bridge Unknown (P) 0.00 %		58 Deck	Unknown (NBI)
99 Border Bridge Struct No. -		59 Superstructure	Unknown (NBI)
Structure Type and Material		60 Substructure	Unknown (NBI)
43 Main Struct Type	Steel continuous	61 Chan. & Chan. Protection	Unknown (NBI)
Stringer		62 Culvert and Retaining Walls	Unknown (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	-1	41 Structure Open, Closed or Posted	Unknown (NBI)
46 No. Approach Spans	-1	63 Operating Rating Method	Unknown (NBI)
107 Deck Struct Type	Unknown (NBI)	64 Oper. Rating	HS Tons
108 Wearing Surface	Unknown (NBI)	65 Inventory Rating Method	Unknown (NBI)
Membrane	Unknown (NBI)	66 Inv. Rating	HS Tons
Dk Protect	Unknown (NBI)	70 Bridge Posting	Unknown (NBI)
208 Dk Overburden 1	None	209 Posted in "Tons"	Tons
Age and Service		Appraisal	
27 Yr Built 1979 106 Yr Reconstructed -1		67 Structural Condition	
42 Type of Service	2 Railroad - On	68 Deck Geometry	N Not applicable (NBI)
	1 Highway - Under	69 Underclear. Vert & Horiz	3 Intolerable - Correct
28 Lanes on Structure	5	71 Waterway Adequacy	Unknown (NBI)
29 ADT 12,800 30 Year of ADT 2010		72 App. Rdwy. Alignment	Unknown (NBI)
109 Average Daily Truck Traffic	1.00	36 Traffic Safety Features	
19 Bypass, Detour Length	3 Miles	113 Scour Critical	N Not Over Waterway
Geometric Data		Inspections	
10 Min Vert Clearance	15 Ft. 7 In.	90 Date of Last Inspection	October 25, 2019
32 Approach Roadway Width	63 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	Unknown (NBI)	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
34 Skew	-1.00	Fracture Critical	N
35 Structure Flared	Unknown (NBI)	Underwater	N
47 Total Horizontal Clearance	62.7 Ft.	Other Special	N
48 Length of Max Span	67 Ft.	218 Channel Profile	-1 01/01/1901
49 Structure Length	85.96 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	-1.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	-1.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb		213 Federal Aid Project Number	M-4-989(00)004
	0.0 Ft.	214 Delayed Inspection	Not Applicable
52 Deck Width	-1.0 Ft.	216 Inspector	Medler, Olson
53 Min Vert Clear. Over Bridge	Ft. In.	Navigation Data	
54 Min Vert Underclearance	15 Ft. 7 In.	38 Navigation Control	Unknown (NBI)
	H Hwy beneath struct	39 Navigation Vertical Clearance	Ft.
55 Min Lateral UnderClear. - Rt	0.0 Ft.	40 Navigation Horizontal Clearance	Ft.
	H Hwy beneath struct	111 Pier or Abutment Protection	Unknown (NBI)
56 Min Lateral UnderClear. - Lt	0.0 Ft.	116 Minimum Navigation Vertical Clearance	Ft.
210 Culvert / 211 Description			

Structure Number: MNOT22 B

[illegible]

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: MNOT23

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	98.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Minot District	22 Owner	City/Municipal Hwy Agenc
03 County	Ward	26 Functional	Urban, Local
04 City	MINOT CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 6 Business 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MOUSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location 7TH ST-CENTRAL AVE NE-MNT		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 330451.8 5345236.9		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type stressed concrete continuous		61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type 1 Concrete-Cast-in-Place		63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface 1 Monolithic Concrete		64 Oper. Rating HS 55	99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect 1 Epoxy Coated Reinforci		66 Inv. Rating HS 20	38 Tons
208 Dk Overburden 1	None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1993 106 Yr Reconstructed		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 2,700 30 Year of ADT 2019		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	2.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	35 Ft.	90 Date of Last Inspection	September 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	34.8 Ft.	Underwater	N
48 Length of Max Span	58 Ft.	Other Special	N
49 Structure Length	166.01 Ft.	218 Channel Profile	— -1 01/01/1901
50 Curb/Sidewalk Widths	5.6 Ft Rt-Side	Chaining Date	None
	5.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	35.1 Ft.	213 Federal Aid Project Number	BRU-4-989(021)021
52 Deck Width	49.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: MNOT23

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	5,813	81	4,713	19	1,100	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	100	0	0	100	100	0	0	0	0
Notes:Hairline cracks in deck with efflorescence. - 9/26/2019										
1130/1:Cracking (RC and Other)	sq.ft	1,000	0	0	100	1,000	0	0	0	0
520/1:Conc Re Prot Sys	sq.ft	5,813	0	0	100	5,813	0	0	0	0
104/1:Pre Clsd Box Girder	ft	968	100	968	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	95	100	95	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	52	0	0	100	52	0	0	0	0
Notes:Light seepage and efflorescence along cold joint between backwall and deck, on both sides of second beam from west, in north abutment. - 9/26/2019										
1130/1:Cracking (RC and Other)	ft	52	0	0	100	52	0	0	0	0
Notes:-Both abutments have hairline cracks. -Diagonal hairline crack in end beam diaphragm in SW corner. - 9/26/2019										
331/1:Re Conc Bridge Railing	ft	331	67	221	33	110	0	0	0	0
1090/1:Exposed Rebar	ft	30	0	0	100	30	0	0	0	0
Notes:-Spalls developing along traffic side of east jersey barrier, short sections of rebar exposed. - 9/26/2019										
1130/1:Cracking (RC and Other)	ft	80	0	0	100	80	0	0	0	0
Notes:Vertical cracks every 4 to 6' - 9/26/2019										
8398/1:Slope Protection	each	2	0	0	0	0	100	2	0	0
2210/1:Movement	each	2	0	0	0	0	100	2	0	0
Notes:Displaced and ineffective - 9/26/2019										
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: -1.5'x4' of SW approach barrier gone from snow plow damage. -Settlement of both approach roadways 1-2". - 9/26/2019

Alert Code 1: 9 welds broke on west sidewalk railing. 2 welds broke on east sidewalk railing. Welds are at the baseplate where it connects to the sidewalk. - 9/26/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: MNOT24

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Minot District	22 Owner	City/Municipal Hwy Agenc
03 County	Ward	26 Functional	Urban, Minor Arterial
04 City	MINOT CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 1 Mainline 08936 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	MOUSE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6TH STREET NW-MINOT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.162	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 14' 30.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 19' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 329038.6 5345678.7		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type :stressed concrete continuous		61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type 1 Concrete-Cast-in-Place		63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface 1 Monolithic Concrete		64 Oper. Rating HS 55	99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect 1 Epoxy Coated Reinforci		66 Inv. Rating HS 23	42 Tons
208 Dk Overburden 1	None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 2000 106 Yr Reconstructed -1		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 3,700 30 Year of ADT 2019		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	39 Ft.	90 Date of Last Inspection	October 07, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	N
48 Length of Max Span	97 Ft.	Other Special	N
49 Structure Length	271.98 Ft.	218 Channel Profile	— -1 01/01/1901
50 Curb/Sidewalk Widths	6.6 Ft Rt-Side	Chaining Date	None
	6.6 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	40.0 Ft.	213 Federal Aid Project Number	SU-4-989(041)042
52 Deck Width	57.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: MNOT24

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/4:Re Concrete Deck	sq.ft	15,640	96	15,040	4	600	0	0	0	0
1130/4:Cracking (RC and Other)	sq.ft	600	0	0	100	600	0	0	0	0
Notes:Cracking, more prevalent in skewed corners. NW & SE corners of bridge deck have well defined cracks full thickness. - 10/7/2019										
520/4:Conc Re Prot Sys	sq.ft	15,640	100	15,640	0	0	0	0	0	0
104/4:Pre Clsd Box Girder	ft	1,903	100	1,893	1	10	0	0	0	0
1130/4:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:-Beam 7, span 1, has a well defined vertical crack at south end on east face. -Beam 1, span 1, has a 1/4" crack on north end west face. - 10/7/2019										
210/4:Re Conc Pier Wall	ft	157	100	157	0	0	0	0	0	0
215/4:Re Conc Abutment	ft	174	89	154	12	20	0	0	0	0
1080/4:Delamination/Spall/Patched Area	ft	20	0	0	100	20	0	0	0	0
Notes:2'x2' spall in NW corner North abutment has 2 1'x1' spall by beam 7. South abutment diaphragms are starting to spall on east side of girders, West side of N. abutment. - 10/7/2019										
301/4:Pourable Joint Seal	ft	79	0	0	0	0	0	0	100	79
2320/4:Seal Adhesion	ft	79	0	0	0	0	0	0	100	79
Notes:Pourable seal has failed. - 10/7/2019										
321/4:Re Conc Approach Slab	sq.ft	100	100	100	0	0	0	0	0	0
331/4:Re Conc Bridge Railing	ft	545	0	0	100	543	0	2	0	0
1080/4:Delamination/Spall/Patched Area	ft	2	0	0	0	0	100	2	0	0
Notes:Spalls developing by 3rd & 4th light pole on the east rail and the 4th pole in west rail. - 10/7/2019										
1130/4:Cracking (RC and Other)	ft	62	0	0	100	62	0	0	0	0
Notes:Jersey barriers have vertical cracks. - 10/7/2019										
1190/4:Abrasion(PSC/RC)	ft	481	0	0	100	481	0	0	0	0
Notes:Abrasion the entire length of railing at the base from snow removal and deicing chemicals. - 10/7/2019										
8398/4:Slope Protection	each	2	50	1	50	1	0	0	0	0
2210/4:Movement	each	1	0	0	100	1	0	0	0	0
Notes:South side displaced - 10/7/2019										
8401/4:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Pourable seal has failed. - 10/7/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: MNOT25

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Minot District	22 Owner	City/Municipal Hwy Agenc
03 County	Ward	26 Functional	Urban, Minor Arterial
04 City	MINOT CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 6 Business 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CP RAILROAD	102 Direction of Traffic	2 2-way traffic
09 Location	27TH ST.SE MINOT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 12' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 14' 54.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 332870.2 5342652.1		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	N N/A (NBI)
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 27
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 2005 106 Yr Reconstructed	-1	Appraisal	
42 Type of Service	5 Highway-pedestrian - On	67 Structural Condition	8 Equal Desirable Crit
	2 Railroad - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	7 Above Minimum
29 ADT 4,400 30 Year of ADT 2019		71 Waterway Adequacy	N Not applicable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	40 Ft.	90 Date of Last Inspection	September 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	39.7 Ft.	Underwater	N
48 Length of Max Span	33 Ft.	Other Special	N
49 Structure Length	168.96 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	10.8 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	40.0 Ft.	213 Federal Aid Project Number	SU-4-989(050)051
52 Deck Width	41.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	23 Ft. 6 In.	Navigation Data	
	R Railroad beneath struc	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	18.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
	R Railroad beneath struc	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: MNOT25

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	8,973	100	8,973	0	0	0	0	0	0
520/1:Conc Re Prot Sys	sq.ft	8,973	100	8,973	0	0	0	0	0	0
115/1:Pre Conc Stringer	ft	1,152	100	1,152	0	0	0	0	0	0
210/1:Re Conc Pier Wall	ft	100	96	96	4	4	0	0	0	0
1130/1:Cracking (RC and Other)	ft	4	0	0	100	4	0	0	0	0
Notes:-WELL DEFINED DIAGONAL CRACK ACROSS SOUTH FACE OF PIER 2. - 9/26/2019										
215/1:Re Conc Abutment	ft	106	81	86	19	20	0	0	0	0
1130/1:Cracking (RC and Other)	ft	20	0	0	100	20	0	0	0	0
Notes:-Vertical well defined cracks in abutment 4. - 9/26/2019										
312/1:Enclosed Bearing	each	42	100	42	0	0	0	0	0	0
330/1:Metal Bridge Railing	ft	168	100	168	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	337	85	287	15	50	0	0	0	0
1130/1:Cracking (RC and Other)	ft	50	0	0	100	50	0	0	0	0
Notes:Vertical cracking approx. 3 to 5' - 9/26/2019										

Remarks: -MINOR WASHOUT AT OUTER END OF SE WING. City of Minot mud jacked the approach slabs in 2018, continue to settle. - 9/26/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: MNOT26

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Minot District	22 Owner	City/Municipal Hwy Agenc
03 County	Ward	26 Functional	Urban, Minor Arterial
04 City	MINOT CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	3 On STRAHNET
5 City Street 6 Business 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BNSF RAILROAD	102 Direction of Traffic	2 2-way traffic
09 Location	MINOT 55 TH ST E & 4T	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 14' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 12' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 335922.8 5344980.3		Condition	
98 Border Bridge Not Applicable (P) 0.00 %		58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	N N/A (NBI)
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	10		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 23
208 Dk Overburden		70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 2013 106 Yr Reconstructed		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	2 Railroad - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	9 Above Desirable
29 ADT 1,230 30 Year of ADT 2019		71 Waterway Adequacy	N Not applicable
109 Average Daily Truck Traffic	20.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	36 Ft.	90 Date of Last Inspection	October 21, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	40.0 Ft.	Underwater	N
48 Length of Max Span	135 Ft.	Other Special	N
49 Structure Length	1,155.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	Y
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	06/13/2013
	40.0 Ft.	213 Federal Aid Project Number	STM-SU-4-989(069)070
52 Deck Width	42.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 11 In.	216 Inspector	Medler, Olson
54 Min Vert Underclearance	23 Ft. 5 In.	Navigation Data	
	R Railroad beneath struc	38 Navigation Control	NA-no waterway
55 Min Lateral UnderClear. - Rt	26.6 Ft.	39 Navigation Vertical Clearance	0 Ft.
	R Railroad beneath struc	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	26.6 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	0 Ft.

Structure Number: MNOT26

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	49,088	89	43,658	11	5,430	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	5,430	0	0	100	5,430	0	0	0	0
Notes:The third deck pour had less then ideal weather conditions which resulted in the south deck spans to have hairline cracks every 3' to 6' all the way across bridge. Deck cracking with efflorescence. - 10/21/2019										
520/1:Conc Re Prot Sys	sq.ft	49,088	100	49,088	0	0	0	0	0	0
205/1:Re Conc Column	each	27	96	26	4	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
210/1:Re Conc Pier Wall	ft	180	100	180	0	0	0	0	0	0
215/1:Re Conc Abutment	ft	91	100	91	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	4	100	4	0	0	0	0	0	0
234/1:Re Conc Pier Cap	ft	382	100	382	0	0	0	0	0	0
300/1:Strip Seal Exp Joint	ft	170	63	107	0	0	0	0	37	63
2330/1:Seal Damage	ft	63	0	0	0	0	0	0	100	63
Notes:Refer to pictures 7-10 - 10/21/2019										
310/1:Elastomeric Bearing	each	140	100	140	0	0	0	0	0	0
321/1:Re Conc Approach Slab	sq.ft	100	100	100	0	0	0	0	0	0
331/1:Re Conc Bridge Railing	ft	2,310	100	2,310	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	ft	260	100	260	0	0	0	0	0	0
Notes:Jersey barriers have hairline cracks - 10/21/2019										
8399/1:Slope Protection, RC	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-106-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	48.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	WESTERN TOWNSHIP	37 Historical Significance	4 Hist sign not determin
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 SOUTH 1 WEST OF HARVEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 02.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 57' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	428475.4 5285289.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	3 Excessive Damage
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 24 44 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 27 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1955 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	3 Intolerable - Correct
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	22 Ft.	Other Special	N
49 Structure Length	21.98 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 6X44' CSP		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 52-106-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
240/3:Steel Culvert	ft	131	0	0	0	0	100	131	0	0
7368/3:Barrel Distortion	ft	131	0	0	0	0	100	131	0	0
Notes:Major distortion in all 3 pipe. - 10/9/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
8402/3:Headwalls	each	2	0	0	100	2	0	0	0	0
1130/3:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
Notes:Cracking on both Headwalls. - 10/9/2019										

Remarks: NBI Remarks: Cracking in north and south headwalls, approximately four feet of embankment on top of pipe. No guardrail. Unable to check inside of pipes,10/15/2007. 3/20/2012 Horn - Inspector. - 10/9/2019

Alert Code 2: Sag in roof about 2 feet in center. 10/26/2015 - Sag in culverts are East 15", Center 11" and West 20" with seperation at center of culverts. - 10/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-109-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	FORWARD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N ROCKFORD CANAL NR1-2	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH 2 EAST OF HARVEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 42' 11.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 52' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	434239.6 5283674.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 25 46 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	90 Ft.	Other Special	N
49 Structure Length	94.16 Ft.	218 Channel Profile	Y 48 07/09/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.8 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey, Horn
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-109-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,078	100	3,078	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	377	100	377	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	187	100	187	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No bridge end markers. - 10/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-112-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	FORWARD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N ROCKFORD CANAL NR1-5	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 5 EAST OF HARVEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 48' 44.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	439105.6 5286705.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 25 46 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	90 Ft.	Other Special	N
49 Structure Length	94.16 Ft.	218 Channel Profile	Y 48 07/09/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.8 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey, Horn
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-112-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,078	100	3,078	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	377	100	377	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	187	97	181	3	6	0	0	0	0
7000/2:Damage	ft	6	0	0	100	6	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No end markers. No riprap. - 10/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-114-09.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Major Collector
04 City	MANFRED TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05215 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N ROCKFORD CANAL	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 2 SOUTH OF HARVEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	33.693	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 46' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	442313.5 5286673.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 38 68 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1993 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	50 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	90 Ft.	Other Special	N
49 Structure Length	94.16 Ft.	218 Channel Profile	Y 48 07/09/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	29.9 Ft.	213 Federal Aid Project Number	DPI-0175(001)521 SITE 1
52 Deck Width	32.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Solwey, Horn
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-114-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,057	100	3,057	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	469	100	469	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	187	100	187	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No advance warning signs. No riprap. 10/10/2013 - Broken post on the NE guardrail. - 10/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-114-10.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Major Collector
04 City	MANFRED TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05215 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST 4 SOUTH OF HARVEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	31.993	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 42' 17.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 46' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	442287.0 5283760.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 35 63 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1993 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	3 SC - Unstable
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	October 22, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	71 Ft.	Other Special	N
49 Structure Length	75.13 Ft.	218 Channel Profile	Y 48 07/09/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	29.9 Ft.	213 Federal Aid Project Number	DPI-0175(001)521 SITE 2
52 Deck Width	32.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Freund
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-114-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,443	100	2,443	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	299	100	299	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	151	100	151	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10/10/2013 - Lots of Vegetation west of bridge obstructing flow. 10/26/2015 - The roadway is settling behind the abutments on both sides from 1 to 2 Inches all the way across leaving a bump coming onto bridge. 10/5/2017 - Bridge ends were fixed with asphalt patch. - 10/22/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-115-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	MANFRED TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N ROCKFORD CANAL NR1-6	102 Direction of Traffic	2 2-way traffic
09 Location	8 EAST 2 SOUTH OF HARVEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 44' 53.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	443926.1 5286655.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 25 46 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1986 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	60 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 0 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	90 Ft.	Other Special	N
49 Structure Length	94.16 Ft.	218 Channel Profile	Y 48 06/20/2016
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.8 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey, Horn
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-115-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,078	100	3,078	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	377	100	377	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	187	100	187	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10/10/2013 - All guardrail end terminals damaged except SW terminal. - 10/9/2019

Alert Code 1: North guardrail has been damaged, one of the seven posts are broken off.rail & post damage On the sw approach guardrail. No end markers or riprap. - 10/9/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-115-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	MANFRED TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 NORTH 6 WEST FESSENDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 44' 52.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	443889.7 5282888.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 30 55 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	70 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	October 22, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	71 Ft.	Other Special	N
49 Structure Length	75.13 Ft.	218 Channel Profile	Y 48 07/09/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.5 Ft.	213 Federal Aid Project Number	CBRS-5215(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-115-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,443	100	2,443	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	299	100	299	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	151	96	145	4	6	0	0	0	0
1090/2:Exposed Rebar	ft	6	0	0	100	6	0	0	0	0
Notes:Spalls with exposed rebar on the East side. - 10/22/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Minor spalling on jersey barrier. - 10/22/2019

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-117-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	37.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	27 Railroad
02 Highway District	Devils Lake District	22 Owner	27 Railroad
03 County	Wells	26 Functional	Rural, Local
04 City	FRAM TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BN RAILROAD	102 Direction of Traffic	2 2-way traffic
09 Location	3N 10E OF HARVEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 49' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 42' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	446416.3 5296334.1	Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	2 Critical
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	N N/A (NBI)
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	7 Wood or Timber	Load Rating and Posting	
		31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	12	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 18 32 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	8 Unknown	66 Inv. Rating	HS 12 22 Tons
Dk Protect	8 Unknown	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	32 Asphalt	209 Posted in "Tons"	5 Tons
Age and Service		Appraisal	
27 Yr Built	1951 106 Yr Reconstructed	67 Structural Condition	2 Intolerable - Replace
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	2 Railroad - Under	69 Underclear. Vert & Horiz	4 Tolerable
28 Lanes on Structure	2	71 Waterway Adequacy	N Not applicable
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	N Not Over Waterway
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 09, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	30.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	43 Ft.	218 Channel Profile	N
49 Structure Length	229.99 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	O.H. BRIDGE NO. 153.0
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Solwey
54 Min Vert Underclearance	23 Ft. 3 In.	Navigation Data	
	R Railroad beneath struc	38 Navigation Control	NA-no waterway
55 Min Lateral UnderClear. - Rt	10.2 Ft.	39 Navigation Vertical Clearance	0 Ft.
	R Railroad beneath struc	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 52-117-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	5,931	0	0	100	5,931	0	0	0	0
510/1:Wearing Surfaces	sq.ft	5,931	0	0	100	5,931	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	361	100	361	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
111/2:Timber Open Girder	ft	2,976	100	2,976	0	0	0	0	0	0
206/3:Timber Column	each	74	92	68	0	0	0	0	8	6
1140/4:Decay/Section Loss	each	4	0	0	0	0	0	0	100	4
1170/4:Split/Delamination (Timber)	each	2	0	0	0	0	0	0	100	2
216/3:Timber Abutment	ft	59	0	0	0	0	100	59	0	0
4000/3:Settlement	ft	59	0	0	0	0	100	59	0	0
235/2:Timber Pier Cap	ft	351	82	289	0	0	0	0	18	62
1140/4:Decay/Section Loss	ft	62	0	0	0	0	0	0	100	62

Remarks: 10/10/2013 - No bridge end marker on the SE corner. NBI Remarks: Cap on east abutment tipped back.
 10/26/2015 - Met with Wells Cty and are going to drop the Load limit to 5 ton and No Trucks signs today.
 10/4/2017 - No change in conditions since last inspection. 10/9/2019 - ROAD CLOSED AND BRIDGE IS BEING REPLACED. SEE PHOTOS - 10/9/2019

Alert Code 1: N piles on both abutments are cracked. The 2nd pile in from the north on the East abutment is rotting on the bottom abutment side. 10/22/2015 - Both abutment are tilting and causing a void behind them which is making roadway settle behind them. 11/17/2016 - West abutment on North side has tilt of 4.5" in 4'. - 10/9/2019

Alert Code 2: 10/22/2015 - North Pile on West abutment is all split and also North Pile on East abutment. The Pier cap on the 3rd pier from the East end has decay for about 7' in on both side of bridge. 11/17/2016 - East Abutment on North side is tilting 8" in 4' causing a (V) in Abutment. Pier cap 6 on the West side of the tracks has Decay for 10' on each end. - 10/9/2019

Alert Code 3: 10/22/2015 - The Pier Cap on the 3rd Pier in from the West has major decay all the way across. East abutment on the North side the 2nd pile is Rotten. 11/17/2016 - Timber piles #3 and #5 on the West Abutment from the North side in are Rotten to the core. - 10/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-117-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	MANFRED TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	1 ROCKFORD CANAL NR1-6A	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH 5 WEST FESSENDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 42' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	447146.1 5286622.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 29 54 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	90 Ft.	Other Special	N
49 Structure Length	94.16 Ft.	218 Channel Profile	Y 48 07/06/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.8 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey, Horn
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-117-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,078	100	3,078	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	377	100	377	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	187	99	185	1	2	0	0	0	0
7000/2:Damage	ft	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No advance warning signs. No end markers. No riprap. - 10/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-118-02.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	HARVEY CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	10 EAST 4 NORTH OF HARVEY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 49' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 41' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	447784.7 5296316.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	29 Gravel/Dir	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	5.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	10 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	45.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	27 Ft.	Other Special	N
49 Structure Length	26.90 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 9X12X65'RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-118-02.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	130	99	128	2	2	0	0	0	0
1080/1:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes:Pop out on the SE corner of the Parapet. - 10/9/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes:Spall on SW wing. - 10/9/2019										

Remarks: 10/10/2013 - Cracking and popout on the SE parapet corner. Popout on the SW wing. - 10/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-119-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	EST NORWAY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N ROCKFORD CANAL NR1-7	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH 2 WEST FESSENDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 39' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	450359.2 5286590.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 29 53 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	90 Ft.	Other Special	N
49 Structure Length	94.16 Ft.	218 Channel Profile	Y 48 07/06/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.8 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey, Horn
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-119-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,078	100	3,078	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	377	100	377	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	187	100	187	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No advance warning signs, no end markers, no riprap, - 10/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-119-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	74.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	EST NORWAY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 2 WEST FESSENDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 39' 43.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	450325.7 5282657.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 31 56 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 13 25 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 22, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	58 Ft.	218 Channel Profile	Y 48 07/06/2015
49 Structure Length	60.04 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Freund
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 52-119-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/2:Pre Clsd Box Girder	ft	479	100	479	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	49	0	0	100	49	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	49	0	0	100	49	0	0	0	0
Notes:Wear on Both abutments along water line. - 10/22/2019										
330/2:Metal Bridge Railing	ft	121	100	121	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	121	100	121	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
7000/3:Damage	each	1	0	0	100	1	0	0	0	0
Notes:Large Horizontal crack in the NW Wing. - 10/22/2019										

Remarks: 9/8/2005 - Rip Rap along wings only NBI Remarks: Abutment scaling along water line. No riprap in front of abutments. Two of six posts damaged on east guardrail. All wings have horizontal cracks. 10/10/2013 - Three of six post damaged on east side guardrail and two of six on west side damaged. - 10/22/2019

Alert Code 1: South abut tilt inward 2 1/2" in 4'. 10/10/2013 - No change in tilt. 10/26/2015 - No change in tilt. 10/5/2017 - No change in tilt. 10/22/2019 - Unable to check tilt due to high water. - 10/22/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-121-09.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Major Collector
04 City	EST NORWAY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05219 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N ROCKFORD CANAL NR1-8	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH OF FESSENDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	5.799	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 37' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	453586.5 5286557.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 29 53 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	235 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	14.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 1 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	90 Ft.	Other Special	N
49 Structure Length	94.16 Ft.	218 Channel Profile	Y 48 07/06/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.8 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey, Horn
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-121-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,078	100	3,078	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	377	100	377	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	187	100	187	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No bridge end markers. - 10/9/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-121-11.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	91.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Major Collector
04 City	EST NORWAY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05219 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH FESSENDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	3.199	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 35.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 37' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	453554.4 5282365.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 13.5 (H 15) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 24 43 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 14 26 Tons
208 Dk Overburden	31 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1951 106 Yr Reconstructed	2001	
42 Type of Service	1 Highway - On	Appraisal	
	5 Waterway - Under	67 Structural Condition	6 Equal Min Criteria
28 Lanes on Structure	2	68 Deck Geometry	6 Equal Min Criteria
29 ADT	235 30 Year of ADT	69 Underclear. Vert & Horiz	N Not applicable (NBI)
109 Average Daily Truck Traffic	14.00	71 Waterway Adequacy	8 Equal Desirable
19 Bypass, Detour Length	4 Miles	72 App. Rdwy. Alignment	7 Above Min Criteria
Geometric Data		36 Traffic Safety Features	1 1 1 1
10 Min Vert Clearance	99 Ft. 12 In.	113 Scour Critical	U Unknown Scour
32 Approach Roadway Width	26 Ft.	Inspections	
33 Bridge Median	0 No median	90 Date of Last Inspection	October 22, 2019
34 Skew	0.00	91 Designated Inspection Frequency	24 Months
35 Structure Flared	0 No flare	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
47 Total Horizontal Clearance	29.2 Ft.	Fracture Critical	N
48 Length of Max Span	54 Ft.	Underwater	N
49 Structure Length	60.04 Ft.	Other Special	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	218 Channel Profile	Y 48 07/06/2015
	0.0 Ft Lt-Side	Chaining Date	None
51 Bridge Rdwy Width - Curb to Curb	29.2 Ft.	207 Transporter Erector Routes and Sites	-1
52 Deck Width	31.5 Ft.	212 Structure Load Rated	06/26/2017
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	213 Federal Aid Project Number	
54 Min Vert Underclearance	0 Ft. 0 In.	214 Delayed Inspection	Not Applicable
	N Feature not hwy or RR	216 Inspector	Horn, Freund
55 Min Lateral UnderClear. - Rt	99.9 Ft.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
56 Min Lateral UnderClear. - Lt	0.0 Ft.	39 Navigation Vertical Clearance	0 Ft.
210 Culvert / 211 Description		40 Navigation Horizontal Clearance	0 Ft.
		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 52-121-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,894	100	1,894	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	121	100	121	0	0	0	0	0	0
107/1:Steel Opn Girder/Beam	ft	239	100	239	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	49	96	47	4	2	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	2	0	0	100	2	0	0	0	0
Notes: There are 2 small spalls on the North Abutment with some exposed rebar. - 10/22/2019										
330/2:Metal Bridge Railing	ft	121	100	121	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Bridge widened, new guardrail, vertical curve south of bridge, abutments from preceeding bridge are still in channel below existinng bridge deck, river channel west of this bridge runs along west inslope of bridge, two 90 degree bends in river channel immediately west of bridge - 10/22/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-123-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	78.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	EST NORWAY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 2 EAST FESSENDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 34' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	456423.5 5281753.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	49 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	30 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	25 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1953 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 22, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	34 Ft.	218 Channel Profile	Y 48 07/09/2015
49 Structure Length	36.09 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.6 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Freund
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-123-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	915	95	869	5	46	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	397	0	0	100	397	0	0	0	0
1000/2:Corrosion	ft	397	0	0	100	397	0	0	0	0
Notes:Covered in freckled rust. - 10/22/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	52	0	0	100	52	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	52	0	0	100	52	0	0	0	0
Notes:All delaminates and scaling. - 10/22/2019										
330/2:Metal Bridge Railing	ft	72	0	0	86	62	14	10	0	0
1000/2:Corrosion	ft	62	0	0	100	62	0	0	0	0
Notes:Covered in freckled rust. - 10/22/2019										
7000/2:Damage	ft	10	0	0	0	0	100	10	0	0
Notes:Vehicle damage on both side of bridge to rail. - 10/22/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/2:Re Conc Bridge Railing	ft	72	0	0	100	72	0	0	0	0
1080/2:Delamination/Spall/Patched Area	ft	72	0	0	100	72	0	0	0	0
Notes:Both are delamination. - 10/22/2019										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1080/3:Delamination/Spall/Patched Area	each	4	0	0	100	4	0	0	0	0
Notes:Delamination and scaling on the wings. - 10/22/2019										

Remarks: NBI Remarks: Some spalling and scaling of abutments, some erosion around wingwalls, vertical curve west of bridge. Vehicle damage to railing both sides. - 10/22/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-123-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	64.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	EST NORWAY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 NORTH 2 EAST FESSENDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 34' 34.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	456766.0 5281687.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	6 Corrugated Steel	64 Oper. Rating	HS 30 54 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 18 33 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	34 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1950 106 Yr Reconstructed	1989	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT	2019	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	3 Intolerable - Correct
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	19 Ft.	90 Date of Last Inspection	October 22, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	34 Ft.	Other Special	N
49 Structure Length	36.09 Ft.	218 Channel Profile	Y 48 07/09/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	212 Structure Load Rated	06/26/2017
52 Deck Width	24.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Freund
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 52-123-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
30/1:Steel Deck - Orthotropic	sq.ft	872	100	872	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	872	100	872	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	361	0	0	100	361	0	0	0	0
1000/2:Corrosion	ft	361	0	0	100	361	0	0	0	0
Notes:Covered in freckled rust. - 10/22/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
215/3:Re Conc Abutment	ft	49	0	0	0	0	100	49	0	0
1080/3:Delamination/Spall/Patched Area	ft	49	0	0	0	0	100	49	0	0
Notes:Delamination with spalls and section loss. - 10/22/2019										
330/2:Metal Bridge Railing	ft	72	0	0	100	72	0	0	0	0
1000/2:Corrosion	ft	72	0	0	100	72	0	0	0	0
Notes:Covered in freckled rust due to loss of protective coating. - 10/22/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1080/3:Delamination/Spall/Patched Area	each	4	0	0	100	4	0	0	0	0
Notes:Wings are delaminates with section loss. - 10/22/2019										

Remarks: NBI Remarks: Old bridge deck replaced with a deck composed of corrugated steel sheeting possibly in 1989.
About 4 inches of bituminous surfacing on new deck. - 10/22/2019

Alert Code 1: Scour under south abutment is exposing piling, spalling of concrete on north and south abutments is exposing rebar, debris from old deck was dropped into channel. - 10/22/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-124-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	EST NORWAY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N ROCKFORD CANAL NR1-9	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH 3 EAST FESSENDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 33' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	458415.5 5286626.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 29 53 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	90 Ft.	Other Special	N
49 Structure Length	94.16 Ft.	218 Channel Profile	Y 48 07/09/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.8 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey, Horn
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 52-124-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,089	100	3,089	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	377	100	377	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	187	99	185	1	2	0	0	0	0
7000/2:Damage	ft	2	0	0	100	2	0	0	0	0
Notes:Damage to the NE corner. - 10/9/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No end markers. Damage to guardrail end on the SE corner. - 10/9/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-125-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	43.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	HAMBURG TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 4 EAST FESSENDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 40' 37.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 31' 60.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	459974.4 5280528.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	6 Corrugated Steel	64 Oper. Rating	HS 19 34 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 12 22 Tons
Dk Protect	None	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	11 Tons
Age and Service		Appraisal	
27 Yr Built	1915 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	4 Tolerable
29 ADT	5 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	October 22, 2019
32 Approach Roadway Width	19 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 10/05/2017
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.7 Ft.	Other Special	N
48 Length of Max Span	38 Ft.	218 Channel Profile	Y 48 07/09/2015
49 Structure Length	41.99 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Freund
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 52-125-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
30/1:Steel Deck - Orthotropic	sq.ft	753	100	753	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	753	100	753	0	0	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
113/2:Steel Stringer	ft	253	0	0	100	253	0	0	0	0
1000/2:Corrosion	ft	253	0	0	100	253	0	0	0	0
Notes:Covered in speckled rust. - 10/22/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
120/2:Steel Truss	ft	85	0	0	100	85	0	0	0	0
1000/2:Corrosion	ft	85	0	0	100	85	0	0	0	0
Notes:Covered in freckled rust. No protective coating. - 10/22/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
152/2:Steel Floor Beam	ft	39	0	0	100	39	0	0	0	0
1000/2:Corrosion	ft	39	0	0	100	39	0	0	0	0
Notes:Covered in freckled rust. No protective coating. - 10/22/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	36	0	0	0	0	100	36	0	0
1090/3:Exposed Rebar	ft	36	0	0	0	0	100	36	0	0
Notes:Exposed rebar on both abutments for full length. - 10/22/2019										
330/2:Metal Bridge Railing	ft	85	0	0	100	85	0	0	0	0
1000/2:Corrosion	ft	85	0	0	100	85	0	0	0	0
Notes:Covered in freckled rust. No protective coating. - 10/22/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
8401/3:Wings	each	4	0	0	0	0	0	0	100	4
1080/3:Delamination/Spall/Patched Area	each	4	0	0	0	0	0	0	100	4

Remarks: NBI Remarks: Posted for 11 ton. One inch of gravel on bridge deck. Vertical curves from both directions of bridge. No visual cracks seen on tension members. Oct.11,2007 no cracks visible on fracture critical members. 10/16/2013 - No Bridge end markers on the west side. - 10/22/2019

Alert Code 1: Erosion around wings. wingwalls are cracked. spalling on abutments with exposure of rebar and piling. rust on all steel members. new corrugated steel deck has been installed. about 20% of bearing concrete for the beam seat on the north abutment has been lost thru scaling. - 10/22/2019

Alert Code 2: nw & sw wingwalls have major section loss. 10/16/2013 - The SE wing is breaking away from the abutment. Major Section loss on both abutments with exposed rebar and Piling. - 10/22/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-129-12.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	HAMBURG TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	8 EAST 2 NORTH FESSENDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 40' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 26' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	466418.4 5281098.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 25 46 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1981 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	1 0 0 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	81 Ft.	Other Special	N
49 Structure Length	84.97 Ft.	218 Channel Profile	Y 48 07/09/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	BRO-52(2)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-129-12.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,605	100	2,605	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	341	100	341	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	171	100	171	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:Cracking in all 4 wings. - 10/8/2019										

Remarks: NBI Remarks: No end markers, cracking on all four wings. 10/16/2013 - Hairline cracking in the South Abutment.
- 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-130-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	87.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	HAMBURG TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	9 EAST 3 NORTH FESSENDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 41' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 25' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	467877.4 5281666.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 30 54 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 26 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1962 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	5 Above Tolerable
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	25 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	24.0 Ft.	Underwater	N
48 Length of Max Span	49 Ft.	Other Special	N
49 Structure Length	50.85 Ft.	218 Channel Profile	Y 48 07/09/2015
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	24.3 Ft.	213 Federal Aid Project Number	CS-722(9)
52 Deck Width	27.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 52-130-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/1:Pre Clsd Box Girder	ft	459	100	459	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	52	100	52	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	102	0	0	100	102	0	0	0	0
1000/2:Corrosion	ft	102	0	0	100	102	0	0	0	0
Notes:Loosing the protective coating and getting freckled rust. - 10/8/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
331/2:Re Conc Bridge Railing	ft	102	98	100	2	2	0	0	0	0
7000/2:Damage	ft	2	0	0	100	2	0	0	0	0
Notes:SE corner damaged. - 10/8/2019										
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No load limit posted, sharp vertical curve to east, embankment washed out behind se wings. Se bridge end marker missing. Scour behind sw wingwall. 10/16/2013 - Only bridge end marker up is on the NE corner. Embankment washed out behind still behind the SW and SE Wings. 10/22/2015 - 10/5/2017 - Still washed out behind the SE and SW wings and only the NE end marker up. - 10/8/2019

Alert Code 1: 10/8/2019- severe erosion behind both wings on South side of bridge . - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-131-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	BREMEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect N ROCKFORD CANAL NR1-12		102 Direction of Traffic	2 2-way traffic
09 Location	9 EAST 5 NORTH FESSENDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 25' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	468100.1 5286366.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 24 44 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1983 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	2 Intolerable - Replace
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	15.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	93 Ft.	Other Special	N
49 Structure Length	98.10 Ft.	218 Channel Profile	Y 48 07/09/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.8 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-131-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,218	100	3,218	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	390	100	390	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	66	100	66	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	197	100	196	1	1	0	0	0	0
1090/2:Exposed Rebar	ft	1	0	0	100	1	0	0	0	0
Notes:NW corner. - 10/8/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: No bridge end markers. Bridge is located in middle of horizontal curve, no riprap, no splice plate on or splice collar around e rail. - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-132-09.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	88.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Major Collector
04 City	BREMEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05233 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	JAMES RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	11 EAST 6 NORTH FESSENDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	6.299	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 22' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	471273.4 5286179.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 30 54 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 14 26 Tons
208 Dk Overburden	34 Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1966 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	110 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	37 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	Y 48 07/09/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.2 Ft.	212 Structure Load Rated	02/26/1993
52 Deck Width	31.8 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-132-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,130	100	1,130	0	0	0	0	0	0
510/1:Wearing Surfaces	sq.ft	1,130	100	1,130	0	0	0	0	0	0
104/2:Pre Clsd Box Girder	ft	400	90	361	10	39	0	0	0	0
1120/2:Efflorescence/Rust Staining	ft	39	0	0	100	39	0	0	0	0
Notes:The box girder on the East side has cracks and Efflorescence. - 10/8/2019										
202/3:Steel Column	each	18	100	18	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
217/3:Masonry Abutment	ft	66	100	66	0	0	0	0	0	0
Notes:This Element should be 218 (Other). This is a steel Abutment Not Brick. - 10/8/2019										
231/2:Steel Pier Cap	ft	66	100	66	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	79	100	79	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/2:Re Conc Bridge Railing	ft	79	98	77	3	2	0	0	0	0
7000/2:Damage	ft	2	0	0	100	2	0	0	0	0
Notes:Damage with exposed rebar. - 10/8/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 9/6/2005 - East outside beam with crack 10/22/2015 - Work done to bridge area with New guardrail installed. - 10/8/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-132-09.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Major Collector
04 City	BREMEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05233 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N ROCKFORD CANAL NR2-2	102 Direction of Traffic	2 2-way traffic
09 Location	6 NORTH 11 EAST FESSENDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	6.299	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 43' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 22' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	471275.0 5286395.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 30 55 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	110 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	1 0 0 1
Geometric Data		113 Scour Critical	5 Stable w/in footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	29 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	14.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	96 Ft.	Other Special	N
49 Structure Length	99.08 Ft.	218 Channel Profile	Y 48 07/09/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.5 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey, Horn
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-132-09.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,025	100	3,025	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	495	100	495	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	92	57	8	5	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	5	0	0	100	5	0	0	0	0
Notes:Slight efflorescence present on NE abutment - 10/8/2019										
331/2:Re Conc Bridge Railing	ft	197	100	197	0	0	0	0	0	0
8398/1:Slope Protection	each	2	0	0	100	2	0	0	0	0
4000/1:Settlement	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 9/6/2005 - Slope protection has gap at abutments about 6 inches wide NBI Remarks: Minor crack ne abutment corner. - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-132-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	CATHAY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	CATHAY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 33' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 24' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	469546.3 5266983.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 41 74 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2009 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	28.87 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	BRO-0052(015)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14'X 5'X 48' RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-132-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	96	100	96	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-135-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	BREMEN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	N ROCKFORD CANAL NR2-3	102 Direction of Traffic	2 2-way traffic
09 Location	14 EAST 7 NORTH FESSENDEN	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 44' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 19' 07.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	476112.2 5288006.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 30 55 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1990 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	1 0 0 1
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	21 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	91 Ft.	Other Special	N
49 Structure Length	94.16 Ft.	218 Channel Profile	Y 48 07/09/2015
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.5 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-135-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,874	100	2,874	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	377	100	377	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	62	90	56	10	6	0	0	0	0
1090/3:Exposed Rebar	ft	2	0	0	100	2	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	4	0	0	100	4	0	0	0	0
Notes:Slight efflorescence on north abutment. - 10/8/2019										
331/2:Re Conc Bridge Railing	ft	187	100	187	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
Notes:Exsposed rebar SE wing. - 10/8/2019										
1080/3:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes:Exsposed rebar on SE wing - 10/8/2019										

Remarks: NBI Remarks: This structure is bureau of reclamation #nr2-3. East-west road next to north end of structure. No bridge end markers. Minor spalling se wing. SE, NE, and NW guardrail is damaged. - 10/8/2019

Alert Code 1: 10/16/2013 - Spall with exposed rebar on South Abutment in the SE corner. Spall areas on SE Wing with exposed rebar on the one. - 10/8/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-136-01.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	VALHALLA TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SHEYENNE RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	14 EAST 13 NORTH FESSENDE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	47d 49' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 18' 35.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	476824.0 5297715.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 42 76 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2013 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	30.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.0 Ft.	Underwater	N
48 Length of Max Span	56 Ft.	Other Special	N
49 Structure Length	112.00 Ft.	218 Channel Profile	Y 48 07/09/2015
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/26/2016
	28.0 Ft.	213 Federal Aid Project Number	BRO-0052(010)
52 Deck Width	30.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Horn, Solwey
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	2 In-Place, Functioning
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-136-01.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	2,958	100	2,958	0	0	0	0	0	0
104/3:Pre Clsd Box Girder	ft	388	100	388	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	33	100	33	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	73	100	73	0	0	0	0	0	0
313/3:Fixed Bearing	each	12	100	12	0	0	0	0	0	0
330/3:Metal Bridge Railing	ft	224	100	224	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-136-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	WOODWARD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	ROCKY RUN CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST OF CATHAY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 33' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 18' 31.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	476778.5 5267985.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2003 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	7 Above Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	October 08, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	53.5 Ft.	Underwater	N
48 Length of Max Span	15 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Horn, Solwey
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 15X4.5X55.7' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-136-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	111	100	111	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-138-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Devils Lake District	22 Owner	County Hwy Agency
03 County	Wells	26 Functional	Rural, Local
04 City	BILODEAU TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PIPESTEM CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 1 NORTH SYKESTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 28' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	99d 15' 59.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	479935.9 5257683.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 74 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 24 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1995 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	10 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	October 09, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	11 Ft.	Other Special	N
49 Structure Length	35.10 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	DPI-0036(001)521
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Solwey, Horn
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
TRIPLE, 11X10X48' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 52-138-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	144	100	144	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-103-44.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Major Collector
04 City	BUFORD TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05303 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	3URLINGTON NORTHERN RR	102 Direction of Traffic	2 2-way traffic
09 Location	AT BUFORD	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.100	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 49' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 59' 47.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	127344.1 5328273.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	8 Very Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	N N/A (NBI)
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 55 99 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1993 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	2 Railroad - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	7 Above Minimum
29 ADT	120 30 Year of ADT 2019	71 Waterway Adequacy	N Not applicable
109 Average Daily Truck Traffic	15.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	12 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	N Not Over Waterway
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	32 Ft.	90 Date of Last Inspection	September 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	27.9 Ft.	Underwater	N
48 Length of Max Span	56 Ft.	Other Special	N
49 Structure Length	60.04 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	DPI-0186(001)531
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	23 Ft. 1 In.	216 Inspector	Isenhower, Peebles
	R Railroad beneath struc	Navigation Data	
55 Min Lateral UnderClear. - Rt	18.0 Ft.	38 Navigation Control	NA-no waterway
	R Railroad beneath struc	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-103-44.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
38/1:Re Concrete Slab	sq.ft	1,679	100	1,679	0	0	0	0	0	0
Notes:Numerous hairline cracks on north end of deck. - 9/13/2019										
1130/1:Cracking (RC and Other)	sq.ft	1,679	100	1,679	0	0	0	0	0	0
Notes:11/17- Numerous cracks on north end of deck, Longitudinal cracking at center of driving lanes, length of bridge. - 9/13/2019										
104/2:Pre Clsd Box Girder	ft	600	100	600	0	0	0	0	0	0
Notes:Minor popout on outside face of first beam from east at south end. Erosion under - 9/13/2019										
215/2:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
1130/2:Cracking (RC and Other)	ft	62	100	62	0	0	0	0	0	0
Notes:Random vertical hairline cracks in faces of both abutments. - 9/13/2019										
331/3:Re Conc Bridge Railing	ft	121	100	121	0	0	0	0	0	0
Notes:Approach Jersey barriers are separated from the bridge Railing. - 9/13/2019										
8399/3:Slope Protection, RC	each	2	0	0	100	2	0	0	0	0
Notes:SW edge of slope protection has 2 spalls on the 2nd and 4th panel from the west - 9/13/2019										
1130/3:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0
Notes:Numerous horizontal hairline cracks in north and south retaining walls. Both retaining walls have horizontal cracks throughout approximately 1.5 foot spacing, showing some moisture through cracks. - 9/13/2019										
2210/3:Movement	each	1	0	0	100	1	0	0	0	0
Notes:The concrete slope protection has settled one foot at abutment face and four inches at retaining wall. Typical both sides of structure. 11/7/2013 - The South concrete slope protection pad has settled 18" now at abutment face. Retaining wall bowing out very slightly - 9/13/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Minor erosion behind all 4 wing walls at junction of wing wall and abutment. - 9/13/2019										

Remarks: NW approach slabs 1' deep x 3' under. Numerous hairline cracks on north end of deck. Tree growing at SE edge of bridge. - 9/13/2019

Alert Code 2: The isometric shapes have settled and moved out of alignment two to three inches at all four corners. - 9/13/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-103-45.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	80.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	21 Other State Agencies
03 County	Williams	26 Functional	Rural, Local
04 City	BUFORD TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	IRRIGATION DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	16 W. 11 S. OF WILLISTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	47d 58' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	104d 00' 06.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	126828.4 5326537.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	8 Wood or Timber	64 Oper. Rating	HS 27 50 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 18 34 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	04 Tons
Age and Service		Appraisal	
27 Yr Built	1936 106 Yr Reconstructed	1995	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	3 Intolerable - Correct
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	20 30 Year of ADT	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	2 Intolerable - Replace
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	12 Ft.	90 Date of Last Inspection	November 22, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	17.4 Ft.	Underwater	N
48 Length of Max Span	28 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	17.4 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	18.7 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, Borschel
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 53-103-45.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
31/1:Timber Deck	sq.ft	560	100	560	0	0	0	0	0	0
111/2:Timber Open Girder	ft	361	0	0	92	331	8	30	0	0
1170/2:Split/Delamination (Timber)	ft	361	0	0	92	331	8	30	0	0
Notes:Minor splits and checks in all timber girders. Moderate split in third girder from north. 12/7/15- 4th girder from south has a moderate split. - 11/22/2019										
206/3:Timber Column	each	10	0	0	100	10	0	0	0	0
1170/3:Split/Delamination (Timber)	each	10	0	0	100	10	0	0	0	0
Notes:12/7/15-Minor to moderate splits in east abutment Timber Col. - 11/22/2019										
216/3:Timber Abutment	ft	39	0	0	100	39	0	0	0	0
1170/3:Split/Delamination (Timber)	ft	39	0	0	100	39	0	0	0	0
Notes:Minor drift damage to piling on west abutment. Minor splits in piling on both abutments. - 11/22/2019										
235/2:Timber Pier Cap	ft	39	100	39	0	0	0	0	0	0
330/3:Metal Bridge Railing	ft	59	0	0	0	0	100	59	0	0
1000/3:Corrosion	ft	44	0	0	0	0	100	44	0	0
7000/3:Damage	ft	15	0	0	0	0	100	15	0	0
Notes:North railing bent out of alignment at NW and SW corners. - 11/22/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
332/3:Timb Bridge Railing	ft	59	100	59	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/7/2013 -New deck installed and timber bridge rail. Bridge reconstructed with timbers salvaged from 53103440, in 1994. No end markers. 11/13/17- Bridge marked as "Private Bridge" - 11/22/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-104-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	CLIMAX TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 8 SOUTH GRENORA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 30' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 59' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	131346.6 5384307.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 55 99 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 43 79 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	26 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	5 Above Tolerable
29 ADT	50 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 23, 2019
32 Approach Roadway Width	25 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/07/2019
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel, Ralphs
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-104-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	549	95	521	5	27	0	1	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	27	0	0	100	27	0	0	0	0
1090/1:Exposed Rebar	sq.ft	1	0	0	0	0	100	1	0	0
Notes:2/7/15- Exposed rebar between 1 & 2nd girder from the North 1' x 1' spall - 7/23/2019										
107/2:Steel Opn Girder/Beam	ft	312	0	0	0	0	100	312	0	0
1000/2:Corrosion	ft	312	0	0	0	0	100	312	0	0
Notes:Minor surface rust on all i-beams. - 7/23/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	49	0	0	51	25	49	24	0	0
Notes:Random hairline cracks in both abutments. - 7/23/2019										
1080/3:Delamination/Spall/Patched Area	ft	25	0	0	100	25	0	0	0	0
Notes:Minor scaling both abutments. - 7/23/2019										
6000/3:Scour	ft	24	0	0	0	0	100	24	0	0
Notes:11/19/2013 - Scour hole under structure 20' x 10' x 2' deep. Exposed footing west abutment. - 7/23/2019										
331/3:Re Conc Bridge Railing	ft	49	0	0	100	49	0	0	0	0
1090/3:Exposed Rebar	ft	10	0	0	100	10	0	0	0	0
Notes:Minor spall in north curb with exposed rebar. Moderate spall with exposed rebar on south curb. - 7/23/2019										
1190/3:Abrasion(PSC/RC)	ft	39	0	0	100	39	0	0	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Minor scaling on all wingwalls - 7/23/2019										

Remarks: Nonstandard end markers. - 7/23/2019**Alert Code 1:** 11/19/2013 - Scour hole under structure 20' x 10' x 2' deep. Exposed footing west abutment. - 7/23/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-104-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	50.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	CLIMAX TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	WILLOW CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 9 SOUTH GRENORA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 28' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 58' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	132658.3 5381893.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 25 45 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 14 27 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1929 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	5 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	0 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 23, 2019
32 Approach Roadway Width	9 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.1 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/07/2019
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel, Ralphs
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 53-104-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	409	2	9	98	400	0	0	0	0
1090/1:Exposed Rebar	sq.ft	5	0	0	100	5	0	0	0	0
Notes:Minor spalls on underside of deck. Minor spall with exposed rebar on underside of deck at nw corner between 1st and 2nd beams from west. - 7/23/2019										
1130/1:Cracking (RC and Other)	sq.ft	395	0	0	100	395	0	0	0	0
Notes:12/7/15- Spalling and cracking on deck. - 7/23/2019										
107/2:Steel Opn Girder/Beam	ft	194	0	0	0	0	100	194	0	0
1000/2:Corrosion	ft	194	0	0	0	0	100	194	0	0
Notes:Corrosion on all steel Beams - 7/23/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	36	0	0	0	0	100	36	0	0
1080/3:Delamination/Spall/Patched Area	ft	36	0	0	0	0	100	36	0	0
Notes:Minor to moderate vertical and diagonal cracks on abutments. Spalls and scaling on both abutments with exposure of piling on north abutment. both abutments show moderate scaling at base of wall. 12/7/15-Exposed piling on North Abutment, 4+" of concrete loss on NE corner 11/13/17- 2 exposed pilings on North Abutment, with 4 + inches of concrete loss - 7/23/2019										
330/3:Metal Bridge Railing	ft	49	0	0	0	0	49	24	51	25
1000/3:Corrosion	ft	24	0	0	0	0	100	24	0	0
7000/3:Damage	ft	25	0	0	0	0	0	0	100	25
Notes:West railing is down. - 7/23/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	49	0	0	100	49	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	49	0	0	100	49	0	0	0	0
Notes:weathering on concrete - 7/23/2019										
8401/3:Wings	each	4	0	0	50	2	50	2	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	50	2	50	2	0	0
Notes:Minor to moderate vertical and diagonal cracks on wingwalls. - 7/23/2019										

Remarks: No end markers. Channel approaches structure at right angle on inlet or east side. 11/19/2013 - Poor channel alignment from the east. Channel bank erosion up and downstream both banks. Bridge on section line 0.81 miles on a prairie trail. - 7/23/2019

Alert Code 1: 11/19/2013 - Bump at both ends more severe on south end. Concrete deterioration with 1 to 3 " of section loss at NW,SE,and NE corners. - 7/23/2019

Alert Code 2: 11/13/17- 2 exposed pilings on North Abutment, with 4 + inches of concrete loss - 7/23/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-105-07.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	87.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Major Collector
04 City	CLIMAX TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05305 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COTTONWOOD CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	6 SOUTH GRENORA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	27.324	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 32' 16.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 56' 60.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	134669.7 5387925.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 37 67 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 40 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	31 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1963 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	205 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	14.00	36 Traffic Safety Features	0 0 1 1
19 Bypass, Detour Length	30 Miles	113 Scour Critical	5 Stable w/in footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 23, 2019
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	30.2 Ft.	Other Special	N
48 Length of Max Span	23 Ft.	218 Channel Profile	1 48 05/07/2019
49 Structure Length	24.93 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	09/19/2017
51 Bridge Rdwy Width - Curb to Curb	30.5 Ft.	213 Federal Aid Project Number	CS-5305(12)
52 Deck Width	31.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel, Ralphs
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 53-105-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/3:Re Conc Opn Girder/Beam	ft	249	70	175	19	46	11	28	0	0
1090/3:Exposed Rebar	ft	28	0	0	0	0	100	28	0	0
Notes:Moderate spalls with exposed reinforcing on bottom of 2nd and 3rd beams from west. 11/17- Moderate spalls with exposed reinforcing on bottom on 2nd beam from the east. - 7/23/2019										
1130/3:Cracking (RC and Other)	ft	46	0	0	100	46	0	0	0	0
Notes:Random superficial cracks on outside channel beams. Random superficial cracks on bottom of all channel beams. - 7/23/2019										
206/3:Timber Column	each	24	0	0	100	24	0	0	0	0
1160/3:Crack (Timber)	each	24	0	0	100	24	0	0	0	0
Notes:Minor drift and ice damage to Columns on south abutment. Minor cracking and splintering at 1/3 point on all abutment Columns. - 7/23/2019										
216/3:Timber Abutment	ft	62	50	31	50	31	0	0	0	0
1900/3:Distortion	ft	31	0	0	100	31	0	0	0	0
Notes:11/17- Abutments both bowing in center, more severe on south, 9 inches - 7/23/2019										
235/2:Timber Pier Cap	ft	62	50	31	50	31	0	0	0	0
1900/2:Distortion	ft	31	0	0	100	31	0	0	0	0
Notes:12/7/15- Northern pier cap rotating outward toward the abutment - 7/23/2019										
330/3:Metal Bridge Railing	ft	49	100	49	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	49	0	0	100	49	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	49	0	0	100	49	0	0	0	0
Notes:Minor spalls on all railing posts. - 7/23/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor collision damage to guardrail at northeast corner. 11/17- Chip Seal has been placed across deck - 7/23/2019

Alert Code 1: Minor cracking and splintering at 1/3 point on all abutment piling. Some inward movement lower portion south abutment. 11/17- Abutments both bowing in center, more severe on south, 9 inches - 7/23/2019

Alert Code 2: Moderate spalls with exposed reinforcing on bottom of 2nd and 3rd beams from west. 11/17- Moderate spalls with exposed reinforcing on bottom on 2nd beam from the east. - 7/23/2019

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SEC 409

Structure Number: 53-109-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	81.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	HEBRON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PAINTED WOODS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 9 NORTH TRENTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 11' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 52' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	138156.9 5349788.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 34 62 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 20 37 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	24 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1955 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	50 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 13, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	30.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.3 Ft.	Other Special	N
48 Length of Max Span	27 Ft.	218 Channel Profile	1 48 05/07/2019
49 Structure Length	28.87 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	23.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	23.3 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Structure Number: 53-109-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	678	63	427	0	0	37	251	0	0
Notes:Need Ice to see under deck fully. - 11/13/2019										
1080/1:Delamination/Spall/Patched Area	sq.ft	222	0	0	0	0	100	222	0	0
Notes:Minor to moderate scaling on underside of deck with exposed rebar. 1/2018- Concrete on underside of deck is crumbling, Scaling moderate to sever. - 11/13/2019										
1090/1:Exposed Rebar	sq.ft	29	0	0	0	0	100	29	0	0
Notes:Exposed rebar and spalling under deck along both north and south edges. - 11/13/2019										
1120/1:Efflorescence/Rust Staining	sq.ft	11	100	11	0	0	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	377	0	0	0	0	100	377	0	0
1000/2:Corrosion	ft	377	0	0	0	0	100	377	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	46	0	0	0	0	100	46	0	0
1080/3:Delamination/Spall/Patched Area	ft	23	0	0	0	0	100	23	0	0
Notes:Moderate scaling on west abutment. - 11/13/2019										
1090/3:Exposed Rebar	ft	23	0	0	0	0	100	23	0	0
Notes:Moderate scaling with exposed rebar on east abutment. - 11/13/2019										
330/3:Metal Bridge Railing	ft	59	0	0	0	0	0	0	100	59
Notes:Metal Railing very low on bridge - 11/13/2019										
1000/3:Corrosion	ft	59	0	0	0	0	0	0	100	59
Notes:Corrosion on guardrail - 11/13/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	59	0	0	49	29	51	30	0	0
1080/3:Delamination/Spall/Patched Area	ft	59	0	0	49	29	51	30	0	0
Notes:Spalls on west 10 ft. of south curb and on center 5 ft. of north curb. Minor to moderate concrete deterioration in both concrete curbs. - 11/13/2019										
8401/3:Wings	each	4	0	0	50	2	50	2	0	0
1080/3:Delamination/Spall/Patched Area	each	4	0	0	50	2	50	2	0	0
Notes:Moderate scaling with exposed rebar on all wings. - 11/13/2019										

Remarks: Nonstandard end markers. Rancher has cattle panels on the North side of bridge obstruction waterway. - 11/13/2019

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SEC 409

Structure Number: 53-109-36.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	53.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	ROUND PRAIRIE TOWNSH	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	2 WEST 3 NORTH TRENTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 06' 40.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 52' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	137107.7 5340168.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	3 Serious
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	61 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	37 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1920 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	6 Equal Minimum
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	September 13, 2019
32 Approach Roadway Width	8 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	14.8 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/07/2019
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	15.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Peebles
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 53-109-36.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	452	0	0	0	0	96	432	4	20
1090/1:Exposed Rebar	sq.ft	20	0	0	0	0	0	0	100	20
Notes:11/17- Severe spalls with exposed rebar underside of deck at outside edges, for 10 feet on either side - 9/13/2019										
1130/1:Cracking (RC and Other)	sq.ft	172	0	0	0	0	100	172	0	0
Notes:Cracking through out underside of deck - 9/13/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	260	0	0	0	0	100	260	0	0
Notes:surface of deck has abrasion and wear - 9/13/2019										
107/2:Steel Opn Girder/Beam	ft	240	0	0	0	0	100	240	0	0
1000/2:Corrosion	ft	240	0	0	0	0	100	240	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	33	0	0	0	0	100	33	0	0
Notes:Moderate spalling with exposed rebar and piling in east abutment. - 9/13/2019										
1080/3:Delamination/Spall/Patched Area	ft	33	0	0	0	0	100	33	0	0
330/3:Metal Bridge Railing	ft	59	0	0	0	0	100	59	0	0
1000/3:Corrosion	ft	59	0	0	0	0	100	59	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	59	0	0	0	0	49	29	51	30
7000/3:Damage	ft	59	0	0	0	0	49	29	51	30
Notes:Half of the concrete bridge railing is gone on the North side. - 9/13/2019										
8401/3:Wings	each	4	0	0	75	3	0	0	25	1
1140/3:Decay/Section Loss	each	3	0	0	100	3	0	0	0	0
Notes:Severe erosion behind the all wing walls. - 9/13/2019										
1900/3:Distortion	each	1	0	0	0	0	0	0	100	1
Notes:Ne wing wall pulling away from abutment. - 9/13/2019										

Remarks: No end markers. Rancher has fenced along South side of bridge, restricting waterway. 12/21/15- North of Structure a berm with a 24" culvert has been installed - 9/13/2019

Alert Code 2: 11/17- Severe spalls with exposed rebar underside of deck at outside edges,for 10 feet on either side - 9/13/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-110-30.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	67.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	MONT TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PAINTED WOODS CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 8 NORTH TRENTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 11' 53.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 51' 12.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	139400.6 5349709.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 33 59 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 19 36 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	24 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1959 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	50 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 13, 2019
32 Approach Roadway Width	23 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.6 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/07/2019
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Peebles, Borschel
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 53-110-30.0

[illegible]

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-110-32.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	54.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	JUDSON TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	PAINTED WOODS CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	6 NORTH TRENTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 41' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 50' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	140085.7 5346730.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 45 81 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 27 49 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1925 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	5 Above Tolerable
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 13, 2019
32 Approach Roadway Width	11 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	15.1 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/07/2019
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	15.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 53-110-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	463	63	292	37	171	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	40	0	0	100	40	0	0	0	0
Notes:areas of concrete under deck delaminating - 11/13/2019										
1090/1:Exposed Rebar	sq.ft	56	0	0	100	56	0	0	0	0
Notes:Underside of deck has moderate spalls with exposed rebar on west and east side. - 11/13/2019										
1120/1:Efflorescence/Rust Staining	sq.ft	11	100	11	0	0	0	0	0	0
Notes:cracking with rust staining under deck - 11/13/2019										
1130/1:Cracking (RC and Other)	sq.ft	75	0	0	100	75	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	240	0	0	0	0	100	240	0	0
Notes:Bracing has been added to support the two west i-beams from ice. - 11/13/2019										
1000/2:Corrosion	ft	240	0	0	0	0	100	240	0	0
Notes:all beams have rusting - 11/13/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	50	50	50	50
215/3:Re Conc Abutment	ft	33	0	0	0	0	0	0	100	33
Notes:Moderate scour adjacent to south abutment, footing undermined from six inches at east end to two feet at west end. Moderate scour adjacent to n abutment, footing undermined 1 foot. - 11/13/2019										
1090/3:Exposed Rebar	ft	17	0	0	0	0	0	0	100	17
Notes:Both abutments have moderate scaling with exposed rebar at water line. Moderate concrete deterioration on north abutment footing. - 11/13/2019										
4000/3:Settlement	ft	16	0	0	0	0	0	0	100	16
Notes:north abutment seems to be tipping to the east. - 11/13/2019										
331/3:Re Conc Bridge Railing	ft	59	0	0	83	49	17	10	0	0
1090/3:Exposed Rebar	ft	10	0	0	0	0	100	10	0	0
Notes:Moderate damage to south 10' of east curb, with exposed Rebar. - 11/13/2019										
1190/3:Abrasion(PSC/RC)	ft	49	0	0	100	49	0	0	0	0
Notes:concrete bridge railing moderate abrasion entire length of bridge - 11/13/2019										
8401/3:Wings	each	4	0	0	75	3	25	1	0	0
1080/3:Delamination/Spall/Patched Area	each	4	0	0	75	3	25	1	0	0
Notes:Minor exposure of piling at northeast and southwest wingwalls. Moderate spall on end of ne wingwall. Nw wing footing spalled off exposing piling. - 11/13/2019										

Remarks: 1/24/2006 - Metal Railing removed from structure. Nonstandard end markers. - 11/13/2019

Alert Code 1: 6" deep erosion between wheel tracks behind north abt. - 11/13/2019

Alert Code 2: Moderate scour adjacent to south abutment, footing under- mined from six inches at east end to two feet at west end. - 11/13/2019

Structure Number: 53-111-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	COW CREEK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COW CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	1 EAST 19 NORTH TRENTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 20' 51.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 49' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	142888.8 5366165.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	9 Excellent
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	4 Low Slump Concrete	64 Oper. Rating	HS 49 89 Tons
Membrane	8 Unknown	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 28 51 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2014 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	1	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	550 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	July 10, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	36.5 Ft.	Underwater	N
48 Length of Max Span	85 Ft.	Other Special	N
49 Structure Length	85.00 Ft.	218 Channel Profile	1 48 05/06/2019
50 Curb/Sidewalk Widths	1.1 Ft Rt-Side	Chaining Date	None
	1.1 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/19/2014
	36.5 Ft.	213 Federal Aid Project Number	BRO-COIA-0053(064)
52 Deck Width	39.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel, Ralphs
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 53-111-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	3,315	100	3,305	0	10	0	0	0	0
1080/3:Delamination/Spall/Patched Area	sq.ft	10	0	0	100	10	0	0	0	0
Notes:Area of spalls at center of south end of deck - 7/10/2019										
520/3:Conc Re Prot Sys	sq.ft	3,315	100	3,315	0	0	0	0	0	0
115/1:Pre Conc Stringer	ft	510	100	510	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	43	100	43	0	0	0	0	0	0
Notes:11/17- Hairline cracks in fillets where I girders meet abutment, hairline horizontal crack in both abutments - 7/10/2019										
310/1:Elastomeric Bearing	each	12	100	12	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	170	100	170	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-115-21.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	51.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	COW CREEK TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COW CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	13 NORTH 5 WEST WILLISTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 20' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 44' 04.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	149176.2 5364648.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 36 65 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 22 41 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	20 Tons
Age and Service		Appraisal	
27 Yr Built	1930 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	6 Equal Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	3 Intolerable - Correct
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	8 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 10, 2019
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	Y 24 07/10/2019
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	15.1 Ft.	Other Special	N
48 Length of Max Span	49 Ft.	218 Channel Profile	1 48 05/06/2019
49 Structure Length	50.85 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	15.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel, Ralphs
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 53-115-21.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	775	90	698	10	77	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	77	0	0	100	77	0	0	0	0
Notes:Minor spalling on deck soffit. Minor scaling on underside of deck. - 7/10/2019										
113/2:Steel Stringer	ft	305	0	0	0	0	0	0	100	305
1000/2:Corrosion	ft	305	0	0	0	0	0	0	100	305
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
120/3:Steel Truss	ft	102	0	0	0	0	100	102	0	0
1000/3:Corrosion	ft	82	0	0	0	0	100	82	0	0
7357/3:Pack Rust	ft	15	0	0	0	0	100	15	0	0
7362/3:Superstructure Traffic Impact	ft	5	0	0	0	0	100	5	0	0
Notes:Impact damage to north truss west end. - 7/10/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
152/3:Steel Floor Beam	ft	52	0	0	0	0	100	52	0	0
1000/3:Corrosion	ft	52	0	0	0	0	100	52	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	33	0	0	88	29	0	0	12	4
Notes:Moderate scaling on east abutment footing with exposed rebar. East abutment has a half inch wide vertical crack at se corner. East abutment has a 1.25-inch-wide vertical crack at center piling, extends entire height of abutment exposing rebar and piling. - 7/10/2019										
1080/3:Delamination/Spall/Patched Area	ft	29	0	0	100	29	0	0	0	0
1090/3:Exposed Rebar	ft	4	0	0	0	0	0	0	100	4
330/3:Metal Bridge Railing	ft	102	0	0	0	0	100	102	0	0
Notes:Railing has moderate damage at all four corners. - 7/10/2019										
1000/3:Corrosion	ft	82	0	0	0	0	100	82	0	0
7000/3:Damage	ft	20	0	0	0	0	100	20	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	102	0	0	100	102	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	102	0	0	100	102	0	0	0	0
7357/3:Pack Rust	each	1	0	0	100	1	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
8398/3:Slope Protection	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0

Remarks: Poor horizontal roadway alignment from the north. - 7/10/2019**Alert Code 2:** East abutment has a 1.25 inch wide vertical crack at center piling, extends entire height of abutment exposing rebar and piling. - 7/10/2019**Fracture Critical:** Fracture Critical Inspection was completed off of bridge deck and walking under bridge - 7/10/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-117-15.0

200 System Designation	2 – County On	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	71.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Major Collector
04 City	BLACKTAIL TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05316 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BLACKTAIL CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 EAST BONETRAIL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	11.498	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 24' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 42' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	152261.4 5373258.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 47 85 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 28 51 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	34 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1961 106 Yr Reconstructed	1975	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	175 30 Year of ADT	2019	6 Equal Minimum
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	25 Miles	36 Traffic Safety Features	0 0 1 1
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	November 15, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.9 Ft.	Underwater	N
48 Length of Max Span	23 Ft.	Other Special	N
49 Structure Length	24.93 Ft.	218 Channel Profile	1 48 05/08/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	28.9 Ft.	212 Structure Load Rated	06/26/2017
52 Deck Width	30.5 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, Borschel, Ralphs
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-117-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	721	95	685	5	36	0	0	0	0
1090/1:Exposed Rebar	sq.ft	36	0	0	100	36	0	0	0	0
Notes:Minor spalls on underside of deck with exposed rebar at center span on south side. Could not see, 7/19, need to go back when frozen or water lowers - 11/15/2019										
510/1:Wearing Surfaces	sq.ft	721	95	685	5	36	0	0	0	0
Notes:7/19- Deck Chip sealed - 11/15/2019										
107/2:Steel Opn Girder/Beam	ft	374	0	0	100	374	0	0	0	0
1000/2:Corrosion	ft	374	0	0	100	374	0	0	0	0
Notes:Rust starting on all Beams - 11/15/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	62	0	0	0	0	100	62	0	0
1090/3:Exposed Rebar	ft	62	0	0	0	0	100	62	0	0
Notes:11-19-2013 -Moderate scaling with exposed piling and rebar on both abutments. Deteriorating concrete with 1/2 to 2" of section loss. - 11/15/2019										
330/3:Metal Bridge Railing	ft	49	0	0	100	49	0	0	0	0
Notes:New w-beam guardrail installed in 1997. - 11/15/2019										
1000/3:Corrosion	ft	49	0	0	100	49	0	0	0	0
Notes:11/17/15- Railing on bridge rusting - 11/15/2019										
515/3:Steel Protective Coating	sq.ft	100	90	90	0	0	0	0	10	10
331/3:Re Conc Bridge Railing	ft	49	0	0	100	49	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	49	0	0	100	49	0	0	0	0
8401/3:Wings	each	4	0	0	0	0	100	4	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	0	0	100	4	0	0
Notes:1/18- Wings have minor cracking and Spalling Typical - 11/15/2019										

Remarks: No end markers. - 11/15/2019**Alert Code 1:** 11-19-2013 -Moderate scaling with exposed piling and rebar on both abutments. Deteriorating concrete with 1/2 to 2" of section loss. - 11/15/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-119-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	WINNER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MUDDY RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 6 SOUTH ZAHL	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 29' 20.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 39' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	155611.4 5381138.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 43 78 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1967 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	30 30 Year of ADT 2018	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	23 Ft.	90 Date of Last Inspection	January 18, 2018
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	1 48 05/08/2019
50 Curb/Sidewalk Widths	0.5 Ft Rt-Side	Chaining Date	None
	0.5 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	12/05/2013
	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Donaldson, Peebles
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-119-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/3:Pre Clsd Box Girder	ft	322	99	318	1	4	0	0	0	0
215/3:Re Conc Abutment	ft	49	84	41	16	8	0	0	0	0
331/3:Re Conc Bridge Railing	ft	79	94	74	6	5	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/12/2011 - Random hairline cracks on outside of 1st beam from south. Minor spall on bottom of 3rd beam from south at center span. 11/20/2013 - No BEM's. Both abutments footings exposed.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-119-16.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	47.60	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	ATHENS TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BLACKTAIL CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	12 SOUTH 3 WEST APPAM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 24' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 38' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	156170.3 5371554.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 23 43 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 14 26 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1935 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 23, 2019
32 Approach Roadway Width	17 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.7 Ft.	Other Special	N
48 Length of Max Span	32 Ft.	218 Channel Profile	1 48 05/08/2019
49 Structure Length	34.12 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel, Ralphs
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 53-119-16.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	581	83	482	17	99	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	99	0	0	100	99	0	0	0	0
Notes:11/17- hairline cracking with efflorescence on underside of deck - 7/23/2019										
107/3:Steel Opn Girder/Beam	ft	272	0	0	0	0	100	272	0	0
1000/3:Corrosion	ft	272	0	0	0	0	100	272	0	0
Notes:rust evident on all beams - 7/23/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	36	0	0	0	0	100	36	0	0
1090/3:Exposed Rebar	ft	18	0	0	0	0	100	18	0	0
Notes:Moderate vertical cracks at piling locations both abutments. 11/20/2013 - Moderate to severe scaling on both abutments with exposed piling & rebar with up to 3" of section loss lower portion of both abutments. 11/17- moderate to severe vertical cracks at piling locations on both abutments, 11/17- some section loss on steel piles 7/19- Concrete not sound in center piles from base to top of abutments - 7/23/2019										
6000/3:Scour	ft	18	0	0	0	0	100	18	0	0
Notes:moderate scour under structure, more severe on south abutment. - 7/23/2019										
330/3:Metal Bridge Railing	ft	69	0	0	0	0	100	69	0	0
1000/3:Corrosion	ft	69	0	0	0	0	100	69	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	69	0	0	100	69	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	69	0	0	100	69	0	0	0	0
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
Notes:Riprap installed front of all four wing walls. - 7/23/2019										
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:Minor cracks with moderate scaling on all wings. - 7/23/2019										

Remarks: Non-std. End markers. 11/20/2013- Poor vertical roadway alignment to the south. - 7/23/2019**Alert Code 1:** 11/20/2013 - Moderate to severe scaling on both abutments with exposed piling & rebar with up to 3" of section loss lower portion of both abutments. - 7/23/2019**Alert Code 2:** 11/17- some section loss on steel piles - 7/23/2019

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SEC 409

Structure Number: 53-119-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	66.20	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	TYRONE TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	OTTERTAIL CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 12 NORTH WILLISTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 20' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 38' 51.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	155672.3 5365097.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 25 46 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 15 28 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1933 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	4 Tolerable
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 15, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.7 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/06/2019
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel, Ralphs
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 53-119-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	409	95	389	5	20	0	0	0	0
1090/1:Exposed Rebar	sq.ft	20	0	0	100	20	0	0	0	0
Notes:Minor spall on bottom of deck with exposed rebar between 2nd and 3rd beams from the east. - 11/15/2019										
107/2:Steel Opn Girder/Beam	ft	194	0	0	0	0	96	186	4	8
1000/2:Corrosion	ft	186	0	0	0	0	100	186	0	0
7000/2:Damage	ft	8	0	0	0	0	0	0	100	8
Notes:Ice damage to west fascia girder near mid- span, see picture. - 11/15/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	36	0	0	0	0	0	0	100	36
Notes:11/21/2013 - From minor to severe scaling on both abutments with exposed rebar and piling with up to 4-6" of concrete section loss. - 11/15/2019										
1080/3:Delamination/Spall/Patched Area	ft	18	0	0	0	0	0	0	100	18
1090/3:Exposed Rebar	ft	18	0	0	0	0	0	0	100	18
330/3:Metal Bridge Railing	ft	39	0	0	0	0	51	20	49	19
Notes:Vehicle damage to east railing knocked out of alignment. West railing bent down from vehicle damage. - 11/15/2019										
1900/3:Distortion	ft	20	0	0	0	0	100	20	0	0
7000/3:Damage	ft	19	0	0	0	0	0	0	100	19
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	49	0	0	100	49	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	49	0	0	100	49	0	0	0	0
6000/3:Scour	each	1	0	0	100	1	0	0	0	0
Notes:Scour exposing face of footing N & S abutments. - 11/15/2019										
8401/3:Wings	each	4	0	0	0	0	100	4	0	0
1080/3:Delamination/Spall/Patched Area	each	4	0	0	0	0	100	4	0	0
Notes:Scaling on all wings with 2-6 inches of section loss on concrete. - 11/15/2019										

Alert Code 1: No end markers. - 11/15/2019**Alert Code 2:** 11/21/2013 - From minor to severe scaling on both abutments with exposed rebar and piling with up to 2" of section loss. - 11/15/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-119-23.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	30.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	TYRONE TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	COW CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	10 NORTH 1 WEST WILLISTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 18' 01.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 38' 52.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	155361.4 5360117.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 22 40 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 13 25 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	24 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1930 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	6 Equal Minimum
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	3 Intolerable - Correct
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 25, 2019
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 11/12/2015
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	15.1 Ft.	Other Special	N
48 Length of Max Span	49 Ft.	218 Channel Profile	Y 48 08/03/2015
49 Structure Length	50.85 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	15.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 53-119-23.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	786	83	652	17	134	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	11	100	11	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	11	0	0	100	11	0	0	0	0
113/2:Steel Stringer	ft	305	0	0	0	0	0	0	100	305
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
120/3:Steel Truss	ft	102	0	0	0	0	100	102	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
152/2:Steel Floor Beam	ft	52	0	0	0	0	100	52	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	33	0	0	0	0	100	33	0	0
330/3:Metal Bridge Railing	ft	102	0	0	0	0	100	102	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	102	0	0	100	102	0	0	0	0
4000/3:Settlement	each	1	0	0	0	0	0	0	100	1
8401/3:Wings	each	4	0	0	75	3	0	0	25	1

Remarks: NBI Remarks: . Moderate rust on truss members. Minor spalls on deck soffit with exposed rebar. Moderate scaling at bottom of both abutments. Minor scour at west end of south abutment. The south end of sw wingwall has moderate cracks with concrete broken out and exposed piling. Ne wingwall broken out at end moderate scaling at base of nw and se wingwalls with exposed reinforcing. 11/21/2013 - Poor horizontal and vertical alignment. 9/26/2016 - Bridge closed by county, barricades and closed signs are up. 11/17- North end a gate is locked across section line and south side barb wire fence blocks for access 2019: Bridge is closed, a full inspection was not completed. Bridge is Positively closed and no traffic is using it. - 7/25/2019

Alert Code 1: No end markers. - 7/25/2019

Alert Code 2: 11/21/2013 - Severe vertical cracks both abutments with exposed rebar and piling. West corner of south abutment is five inches lower than east corner. Severe scaling and deterioration to sw corner of south abutment with exposed piling and rebar with 2 to 6" of section loss on the SW corner. Severe bump south end of bridge. Roadway embankment settled washed away at the sw corner 1' deep x 3' wide. - 7/25/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-119-33.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	WILLISTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SAND CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	WEST WILLISTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 09' 15.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 39' 07.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	154052.1 5343914.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2015 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	1	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	4 Minimum Tolerable
19 Bypass, Detour Length	124 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 07, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	5.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	39.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	03/09/2016
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, Donaldson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
TRIPLE 12 X 12 X 162' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-119-33.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	486	100	486	0	0	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes: _										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 08/03/2015 - Bridge replaced with a double 12 x 12 x 162' and a single 12 x 12 x 162' RCB. 11/17- some sediment in all barrels

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-119-34.1

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	41.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	WILLISTON TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	SAND CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	WEST WILLISTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	No
GPS Coordinates XY	153949.0 5342798.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 31 56 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 21 39 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	5 Tons
Age and Service		Appraisal	
27 Yr Built	1939 106 Yr Reconstructed	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	5 Above Tolerable
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 1 1 1
19 Bypass, Detour Length	1 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 10, 2019
32 Approach Roadway Width	15 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	Y 24 07/10/2019
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	15.1 Ft.	Other Special	N
48 Length of Max Span	35 Ft.	218 Channel Profile	Y 48 06/06/1998
49 Structure Length	37.07 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	15.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel, Ralphs
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 53-119-34.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	570	0	0	96	545	0	0	4	25
1090/1:Exposed Rebar	sq.ft	25	0	0	0	0	0	0	100	25
Notes:Deck on both edges has exposed rebar at center span and west end - 7/10/2019										
1120/1:Efflorescence/Rust Staining	sq.ft	11	100	11	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	97	0	0	100	97	0	0	0	0
1190/1:Abrasion(PSC/RC)	sq.ft	448	0	0	100	448	0	0	0	0
113/2:Steel Stringer	ft	223	0	0	0	0	0	0	100	223
1000/2:Corrosion	ft	223	0	0	0	0	0	0	100	223
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
120/2:Steel Truss	ft	75	0	0	0	0	100	75	0	0
1000/2:Corrosion	ft	75	0	0	0	0	100	75	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
152/2:Steel Floor Beam	ft	33	0	0	0	0	100	33	0	0
1000/2:Corrosion	ft	33	0	0	0	0	100	33	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	33	0	0	0	0	49	16	52	17
1080/3:Delamination/Spall/Patched Area	ft	16	0	0	0	0	100	16	0	0
Notes:East abutment has delamination and cracking with some exposed pile at NE corner - 7/10/2019										
4000/3:Settlement	ft	17	0	0	0	0	0	0	100	17
Notes:West Abutment settling NW corner has settled approximately 1.5 feet - 7/10/2019										
330/3:Metal Bridge Railing	ft	75	0	0	0	0	73	55	27	20
Notes:Impact damage to ends of bridge railing - 7/10/2019										
1000/3:Corrosion	ft	55	0	0	0	0	100	55	0	0
7000/3:Damage	ft	20	0	0	0	0	0	0	100	20
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	75	0	0	100	75	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	75	0	0	100	75	0	0	0	0
4000/3:Settlement	each	1	0	0	0	0	0	0	100	1
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0

Alert Code 3: 7/2019- NW Corner of abutment is substantially lower approximately 1.5 feet. - 7/10/2019**Fracture Critical:** Fracture Critical Inspection was completed off of bridge deck and walking under bridge - 7/10/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-120-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	57.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	BLUE RIDGE TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MUDDY RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 2 SOUTH APPAM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 32' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 37' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	158137.8 5387447.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 33 59 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 19 36 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	22 Tons
Age and Service		Appraisal	
27 Yr Built	1937 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 23, 2019
32 Approach Roadway Width	18 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.7 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/08/2019
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel, Ralphs
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-120-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	506	95	481	5	25	0	0	0	0
1090/1:Exposed Rebar	sq.ft	25	0	0	100	25	0	0	0	0
Notes:Deck soffit has minor spalls with exposed rebar. - 7/23/2019										
107/2:Steel Opn Girder/Beam	ft	240	0	0	0	0	100	240	0	0
1000/2:Corrosion	ft	240	0	0	0	0	100	240	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	36	0	0	0	0	100	36	0	0
1080/3:Delamination/Spall/Patched Area	ft	6	0	0	0	0	100	6	0	0
Notes:Concrete deterioration with up to 3-4" section loss at NW, SW and SE abutment corners where they meet the wing at the water line. Minor vertical cracks at piling locations in both Abutments. Minor scaling on face of both abutments. - 7/23/2019										
6000/3:Scour	ft	30	0	0	0	0	100	30	0	0
Notes:11/20/2013 - Both abutments have minor undermining with exposed piling. 11/20/2013 - East abutment footing exposed. 12/1/2015-West abutment has 3 plus feet of undermining, east abutment has 1.5 plus feet of undermining - 7/23/2019										
330/3:Metal Bridge Railing	ft	59	0	0	0	0	0	0	100	59
7000/3:Damage	ft	59	0	0	0	0	0	0	100	59
Notes:Metal Railing bent out of alignment. - 7/23/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	59	0	0	100	59	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	59	0	0	100	59	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
1080/3:Delamination/Spall/Patched Area	each	2	0	0	100	2	0	0	0	0
Notes:NW and NE Wing walls have damage where they connect at to the abutment and waterline - 7/23/2019										

Remarks: No end markers. 11/20/2013 - Structure posted 22 tons east side only. - 7/23/2019**Alert Code 1:** 11/20/2013 - Both abutments have minor undermining with exposed piling. Concrete deterioration with up to 3-4" section loss at NW,SW and SE abutment corners where they meet the wing at the water line. - 7/23/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-120-07.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	97.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	WINNER TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MUDDY RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 WEST 3 SOUTH APPAM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 31' 56.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 38' 32.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	157341.4 5385876.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 39 71 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 20 37 Tons
208 Dk Overburden	23 Gravel/Dir	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1980 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	July 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.9 Ft.	Underwater	N
48 Length of Max Span	38 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	1 48 05/08/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	26.2 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	27.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, Borschel, Ralphs
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-120-07.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/3:Pre Opn Conc Girder/Beam	ft	279	98	274	2	5	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	5	0	0	100	5	0	0	0	0
Notes:Random minor popouts on outside of outside t-beams. 12/1/15 - Minor Rust staining under T-beams 1 joint in at North and South 12/2011- Popouts on outside of first T-Beams from the east and west. - 7/23/2019										
215/3:Re Conc Abutment	ft	56	0	0	100	56	0	0	0	0
Notes:Hairline vertical cracks in both abutments. Minor scaling at base of abutments. Moderate spall at jct. of abutment and deck at ne and sw corners with exposed reinforcing. 12/2011- Moderate spall at Jct of abutment and deck at north east end. Minor spalls at nw and se corners. - 7/23/2019										
6000/3:Scour	ft	56	0	0	100	56	0	0	0	0
Notes:11/20/2013 - Riprap displaced both abutments. Both footings exposed. - 7/23/2019										
331/3:Re Conc Bridge Railing	ft	79	92	73	8	6	0	0	0	0
7000/3:Damage	ft	6	0	0	100	6	0	0	0	0
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
2210/3:Movement	each	1	0	0	100	1	0	0	0	0
Notes:11/20/2013 - Channel bank erosion near SW wing. Channel moving laterally to the east south of structure. - 7/23/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Minor scaling at base of wings. - 7/23/2019										

Alert Code 1: 11/20/2013 - Channel bank erosion near SW wing. Channel moving laterally to the east south of structure. - 7/23/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-121-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	55.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	BLUE RIDGE TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MUDDY RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 1 SOUTH APPAM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 33' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 36' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	160436.7 5388323.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 18 33 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 12 22 Tons
Dk Protect	None	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	20 Tons
Age and Service		Appraisal	
27 Yr Built	1920 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 21, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 12/01/2015
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.1 Ft.	Other Special	N
48 Length of Max Span	49 Ft.	218 Channel Profile	1 48 05/08/2019
49 Structure Length	50.85 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel, Ralphs
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 53-121-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	883	95	839	5	44	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	44	0	0	100	44	0	0	0	0
Notes:12/1/2015- Minor cracking and efflorescence on underside of deck. - 11/21/2019										
113/2:Steel Stringer	ft	305	0	0	0	0	0	0	100	305
1000/2:Corrosion	ft	305	0	0	0	0	0	0	100	305
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
120/3:Steel Truss	ft	102	0	0	0	0	100	102	0	0
1000/3:Corrosion	ft	102	0	0	0	0	100	102	0	0
Notes:Truss members have moderate rust. - 11/21/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
152/2:Steel Floor Beam	ft	56	0	0	0	0	100	56	0	0
1000/2:Corrosion	ft	56	0	0	0	0	100	56	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	36	0	0	0	0	100	36	0	0
1080/3:Delamination/Spall/Patched Area	ft	36	0	0	0	0	100	36	0	0
Notes:11/20/2013 - Minor undermining at base of both abutments. Channel moving laterally to the SE side near the SE wing. North abutment ripped in 1994. Minor vertical cracks in both abutments. Minor scaling on both abutments. - 11/21/2019										
330/3:Metal Bridge Railing	ft	102	0	0	0	0	100	102	0	0
1000/3:Corrosion	ft	102	0	0	0	0	100	102	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	105	0	0	100	105	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	105	0	0	100	105	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Minor scaling and Minor diagonal cracks in all wing walls. - 11/21/2019										

Alert Code 1: No end markers. 11/20/2013 - Minor undermining at base of both abutments. Channel moving laterally to the SE side near the SE wing. - 11/21/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-121-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	70.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	MISSOURI RIDGE TOWNS	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CAMP CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	4 NORTH WILLISTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 14' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 36' 15.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	158178.5 5352923.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 31 56 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 18 34 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1953 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	6 Equal Minimum
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	3 Intolerable - Correct
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 15, 2019
32 Approach Roadway Width	9 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	14.8 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/15/2019
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	15.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 53-121-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	355	95	337	5	18	0	0	0	0
1090/1:Exposed Rebar	sq.ft	18	0	0	100	18	0	0	0	0
Notes:Exposed Rebar between 2nd and 3rd beams from east next to south abutment. - 11/15/2019										
107/2:Steel Opn Girder/Beam	ft	193	0	0	100	193	0	0	0	0
1000/2:Corrosion	ft	193	0	0	100	193	0	0	0	0
Notes:11/17- steel girders flaking, starting to see possible section loss - 11/15/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	33	0	0	0	0	100	33	0	0
Notes:Moderate vertical cracks at piling locations, typical of both abutments. - 11/15/2019										
1090/3:Exposed Rebar	ft	33	0	0	0	0	100	33	0	0
Notes:Both abutments have moderate (11/17) spalls with exposed piling and up to 3" of section loss. Moderate scaling at base of abutments & wingwalls. 11/2015- South Abutment at water line has cracking and exposed rebar - 11/15/2019										
330/3:Metal Bridge Railing	ft	49	0	0	0	0	0	0	100	49
7000/3:Damage	ft	49	0	0	0	0	0	0	100	49
Notes:East railing bent out of alignment. No railing west side. - 11/15/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	49	0	0	100	49	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	49	0	0	100	49	0	0	0	0
Notes:concrete curb has abrasion - 11/15/2019										
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
1080/3:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes:Spall in top of NW wingwall - 11/15/2019										

Alert Code 1: No bridge end markers. east railing bent out of alignment. Both abutments have moderate (11/17) spalls with exposed piling and up to 3" of section loss. Moderate scaling at base of abutments & wingwalls. No railing west side. 11/17- steel girders flaking, starting to see possible section loss - 11/15/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-122-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	BLUE RIDGE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MUDDY RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH APPAM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 33' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 34' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	162031.9 5387943.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 35 64 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 21 38 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1957 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	50 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 23, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	40 Ft.	218 Channel Profile	1 48 05/08/2019
49 Structure Length	41.99 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel, Ralphs
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 53-122-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	969	95	921	5	48	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	48	0	0	100	48	0	0	0	0
Notes:minor cracking on underside of deck - 7/23/2019										
107/2:Steel Opn Girder/Beam	ft	545	0	0	100	545	0	0	0	0
1000/2:Corrosion	ft	545	0	0	100	545	0	0	0	0
Notes:Minor surface rust on lower flanges of all beams. - 7/23/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	49	100	49	0	0	0	0	0	0
1130/3:Cracking (RC and Other)	ft	49	100	49	0	0	0	0	0	0
Notes:Minor scaling on both abutment faces. Random hairline vertical cracks in abutments. - 7/23/2019										
330/3:Metal Bridge Railing	ft	85	0	0	51	43	0	0	49	42
1000/3:Corrosion	ft	43	0	0	100	43	0	0	0	0
7000/3:Damage	ft	42	0	0	0	0	0	0	100	42
Notes:11/19/2013 - East railing posts are loose and bent away. 12/1/15- West Railing 3 bolts missing - 7/23/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	85	0	0	0	0	41	35	59	50
1090/3:Exposed Rebar	ft	50	0	0	0	0	0	0	100	50
Notes:Severe concrete deterioration in west curb with exposed rebar for entire length. Moderate concrete deterioration in east curb with exposed rebar for entire length. - 7/23/2019										
1190/3:Abrasion(PSC/RC)	ft	35	0	0	0	0	100	35	0	0
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Alert Code 1: 11/19/2013 - East railing posts are loose and bent away. 12/1/15- West Railing 3 bolts missing - 7/23/2019

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SEC 409

Structure Number: 53-122-15.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	69.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	ATHENS TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MUDDY RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 WEST 11 SOUTH APPAM	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 24' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 35' 56.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	159753.1 5372802.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 37 66 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 22 40 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	21 Tons
27 Yr Built	1974 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	4 Minimum Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	150 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	26 Ft.	90 Date of Last Inspection	July 23, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.5 Ft.	Underwater	N
48 Length of Max Span	37 Ft.	Other Special	N
49 Structure Length	40.03 Ft.	218 Channel Profile	1 48 05/08/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	212 Structure Load Rated	06/18/2018
52 Deck Width	29.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, Borschel, Ralphs
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-122-15.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/3:Pre Clsd Box Girder	ft	400	100	400	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	59	0	0	0	0	100	59	0	0
Notes:11/19/2013 - Moderate spalls at junction of North West wing wall & west abutments exposing piling & rebar with 2-4" of section loss. North West wing wall separating from abutment. Moderate spall at junction of south west wing wall & east abut up to 2-4" section loss. Both footings exposed. West abutment has minor vertical cracks at piling locations. Minor scour west abutments. Bottom 2' both abutments delaminating. 1/18- hairline to moderate Cracks in both abutments 1/18- 6 inches of separation on NW wing Wall. - 7/23/2019										
1080/3:Delamination/Spall/Patched Area	ft	34	0	0	0	0	100	34	0	0
1090/3:Exposed Rebar	ft	10	0	0	0	0	100	10	0	0
6000/3:Scour	ft	15	0	0	0	0	100	15	0	0
Notes:11/19/2013 - Riprap displaced both abutments. - 7/23/2019										
330/3:Metal Bridge Railing	ft	79	0	0	75	59	25	20	0	0
Notes:1/13/2016- SE end of guardrail broken, - 7/23/2019										
7000/3:Damage	ft	79	0	0	75	59	25	20	0	0
Notes:South Guard Rail pushed out - 7/23/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
Notes:11/19/2013 - County forces have added riprap at all 4 wings. - 7/23/2019										
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:Numerous hairline cracks in all wings. - 7/23/2019										

Remarks: 1/13/2016- EB 21 ton post sign down. - 7/23/2019

Alert Code 1: 11/19/2013 - Moderate spalls at jct of nw wingwall & west abuts exposing piling & rebar with 2-4" of section loss. Nw wingwall separating from abut. Minor spall at jct of sw wingwall & east abut up to 1" section loss. Both footings exposed. 1/18- 6 inches of separation on NW wing Wall. - 7/23/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-122-20.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	60.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	EAST FORK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	E. FORK LITTLE CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 12 NORTH WILLISTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 20' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 34' 60.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	160466.6 5365291.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	45 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	27 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	15 Tons
Age and Service		Appraisal	
27 Yr Built	1930 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	4 Tolerable
29 ADT	25 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 15, 2019
32 Approach Roadway Width	21 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.7 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/09/2019
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.5 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.5 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 53-122-20.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	506	95	481	5	25	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	25	0	0	100	25	0	0	0	0
Notes:1/13/2016 – Minor Hairline cracking on bottom of deck - 11/15/2019										
107/2:Steel Opn Girder/Beam	ft	240	0	0	0	0	100	240	0	0
Notes:need ice to complete inspection - 11/15/2019										
1000/2:Corrosion	ft	210	0	0	0	0	100	210	0	0
7000/2:Damage	ft	30	0	0	0	0	100	30	0	0
Notes:severe ice damage to east channel beam. - 11/15/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	36	0	0	50	18	50	18	0	0
1130/3:Cracking (RC and Other)	ft	18	0	0	100	18	0	0	0	0
Notes:Both abutments have minor vertical cracks at piling locations. - 11/15/2019										
6000/3:Scour	ft	18	0	0	0	0	100	18	0	0
Notes:North abutment footing exposed. - 11/15/2019										
330/3:Metal Bridge Railing	ft	59	0	0	0	0	0	0	100	59
7000/3:Damage	ft	59	0	0	0	0	0	0	100	59
Notes:Vehicle damage to both railings. - 11/15/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	59	100	59	0	0	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	100	1	0	0	0	0	0	0
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
Notes:North West top of the wing has moderate crack at jct. Of wing and deck. S.E. Wing has moderate spall and longitudinal crack at jct of wing and deck. - 11/15/2019										
1080/3:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes:N.E. Wingwall has two-foot spall out of top face. - 11/15/2019										

Alert Code 1: No end markers. severe ice damage to east channel beam. - 11/15/2019

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SEC 409

Structure Number: 53-122-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	EAST FORK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MUDDY RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 10 NORTH WILLISTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 18' 49.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 35' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	159792.4 5361328.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	8 Very Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	None	66 Inv. Rating	HS 27 50 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2000 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 07, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	28.2 Ft.	Underwater	N
48 Length of Max Span	104 Ft.	Other Special	N
49 Structure Length	107.94 Ft.	218 Channel Profile	1 48 05/10/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	28.5 Ft.	213 Federal Aid Project Number	DPI-0036(005)532
52 Deck Width	30.8 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Donaldson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 53-122-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,078	100	3,078	0	0	0	0	0	0
109/1:Pre Opn Conc Girder/Beam	ft	420	100	420	0	0	0	0	0	0
215/2:Re Conc Abutment	ft	62	100	62	0	0	0	0	0	0
330/2:Metal Bridge Railing	ft	217	100	217	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks:11/21/2013 - Channel bank erosion south of structure. 11/17- hairline cracks in west abutment, hairline cracks in bottom of deck

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SEC 409

Structure Number: 53-122-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	71.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	PHERRIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MUDDY RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 5 NORTH WILLISTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 14' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 35' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	159694.6 5353276.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Girder - FB		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	3	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 21 38 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 12 23 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1954 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	430 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	10.00	36 Traffic Safety Features	1 1 1 1
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 10, 2019
32 Approach Roadway Width	30 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.3 Ft.	Other Special	Y 96 11/15/2012
48 Length of Max Span	43 Ft.	218 Channel Profile	1 48 06/27/2019
49 Structure Length	120.08 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	24.3 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel, Ralphs
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-122-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	2,917	0	0	100	2,917	0	0	0	0
Notes:11/7/17 Map cracking on underside of deck - 7/10/2019										
1130/1:Cracking (RC and Other)	sq.ft	2,917	0	0	100	2,917	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	479	0	0	100	479	0	0	0	0
1000/2:Corrosion	ft	479	0	0	100	479	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	85	85	15	15	0	0	0	0
205/3:Re Conc Column	each	4	100	4	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	59	51	30	49	29	0	0	0	0
6000/3:Scour	ft	29	0	0	100	29	0	0	0	0
Notes:West abutment has scour under it 3 feet back, 6 inches deep, see photo - 7/10/2019										
234/2:Re Conc Pier Cap	ft	59	100	59	0	0	0	0	0	0
304/3:Open Expansion Joint	ft	59	100	59	0	0	0	0	0	0
311/2:Moveable Bearing	each	8	0	0	100	8	0	0	0	0
1000/2:Corrosion	each	8	0	0	100	8	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
313/2:Fixed Bearing	each	8	100	8	0	0	0	0	0	0
Notes:11/7/17 bearing full of dirt. - 7/10/2019										
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
330/3:Metal Bridge Railing	ft	240	100	240	0	0	0	0	0	0
Notes:3/2013 - New bridge rail retrofit in 2012. - 7/10/2019										
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	240	100	240	0	0	0	0	0	0
333/1:Other Bridge Railing	ft	240	100	240	0	0	0	0	0	0
6000/3:Scour	each	1	0	0	0	0	100	1	0	0
Notes:11/22/2013 - Scour areas have been repaired on both inslopes. 11/7/17- Maintenance has addressed previous scour issue. - 7/10/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/12/2015- SE guardrails end is damaged 11-15-2012 - AECOM UT Pin Inspection 5/2016 - This bridge has a bridge number of 85-918.209 that is used for the state truck routing system. - 7/10/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-122-30.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	88.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Major Collector
04 City	PHERRIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05328 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MUDDY RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 NORTH 1 EAST WILLISTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 11' 52.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 36' 14.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	157930.3 5348530.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	stressed concrete continuous	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 55 99 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	8 Unknown	66 Inv. Rating	HS 29 53 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	1984 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	340 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic	10.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	7 Countermeasures
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	November 13, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	48 Ft.	Other Special	N
49 Structure Length	120.08 Ft.	218 Channel Profile	1 48 06/27/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	29.9 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	32.5 Ft.	213 Federal Aid Project Number	CBRS-5328(51)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, Borschel
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 53-122-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,595	99	3,545	1	50	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	20	0	0	100	20	0	0	0	0
Notes:11/12/2015 - South Side of deck, mid-span had minor cracking and efflorescence - 11/13/2019										
1190/1:Abrasion(PSC/RC)	sq.ft	30	0	0	100	30	0	0	0	0
Notes:Random minor popouts in deck surface. - 11/13/2019										
104/2:Pre Clsd Box Girder	ft	479	100	479	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	66	99	65	2	1	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	1	0	0	100	1	0	0	0	0
Notes:11/17- spall at beam seat at top of pier - 11/13/2019										
215/3:Re Conc Abutment	ft	66	0	0	100	66	0	0	0	0
Notes:Spall in face of west abutment. 11/22/2013 - West channel bank erosion downstream. Bank North West of Bridge and South West of Bridge are eroding - 11/13/2019										
6000/3:Scour	ft	66	0	0	100	66	0	0	0	0
Notes:11/22/2013 - undermining of both abutments exposing 3 piles at the west abutment and 4 piles at the east abutment. 11/12/2015- Losing some fill under the approaches 11/17- fill under approach loss is 1' deep x 2' back west and east. - 11/13/2019										
331/3:Re Conc Bridge Railing	ft	240	85	205	15	35	0	0	0	0
1120/3:Efflorescence/Rust Staining	ft	35	0	0	100	35	0	0	0	0
Notes:Minor vertical cracks in all jersey barrier joints extending into edge of deck with minor efflorescence. - 11/13/2019										
8398/3:Slope Protection	each	2	0	0	0	0	0	0	100	2
Notes:11/22/2013 - Riprap settled and displaced at both abutments - 11/13/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Minor collision damage to end treatment of w-beam guard- rail at NE corner. - 11/13/2019**Alert Code 1:** 11/22/2013 - Riprap settled and displaced at both abutments with undermining of both abutments exposing 3 piles at the west abutment and 4 piles at the east abutment. 11/12/2015- Losing some fill under the approaches 11/17- fill under approach loss is 1' deep x 2' back west and east. - 11/13/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-123-19.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	EAST FORK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 14 N WILLISTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 22' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 33' 33.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	162374.8 5367382.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	6 Bank Slumping
Adjacent Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 35 63 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 21 38 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	25 Tons
Age and Service		Appraisal	
27 Yr Built	1965 106 Yr Reconstructed	1975	
42 Type of Service	1 Highway - On	67 Structural Condition	5 Above Min Tolerable
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	24 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	27 Ft.	90 Date of Last Inspection	July 25, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	25.3 Ft.	Underwater	N
48 Length of Max Span	42 Ft.	Other Special	N
49 Structure Length	43.96 Ft.	218 Channel Profile	1 48 05/08/2019
50 Curb/Sidewalk Widths	0.8 Ft Rt-Side	Chaining Date	None
	0.8 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	25.3 Ft.	212 Structure Load Rated	12/18/2015
52 Deck Width	26.9 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, Borschel
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: 53-123-19.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
104/3:Pre Clsd Box Girder	ft	397	100	397	0	0	0	0	0	0
1110/3:Cracking (PSC)	ft	45	100	45	0	0	0	0	0	0
Notes:Random hairline cracks on outside of first beam from east and west. - 7/25/2019										
215/3:Re Conc Abutment	ft	52	0	0	0	0	100	52	0	0
1080/3:Delamination/Spall/Patched Area	ft	52	0	0	0	0	100	52	0	0
Notes:11/22/2013 - Both abutment walls have minor to moderate scaling with exposed rebar with up to 2" of section loss at the north abutment. Minor exposure of two piling at base of north abutment. - 7/25/2019										
331/3:Re Conc Bridge Railing	ft	89	96	85	5	4	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes:Moderate spall in east curb at south end. - 7/25/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/22/2013 - Channel west of structure moving north laterally. Channel bank erosion west of structure. No railing. - 7/25/2019

Alert Code 1: 11/22/2013 - Both abutment walls have minor to moderate scaling with exposed rebar with up to 2" of section loss at the north abutment. - 7/25/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-123-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	EAST FORK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MUDDY RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 8 NORTH WILLISTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 17' 04.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 34' 25.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	160757.4 5358044.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	9 Excellent
Structure Type and Material		60 Substructure	9 Excellent
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Spread Box Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	1 Concrete-Cast-in-Place	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	1 Monolithic Concrete	64 Oper. Rating	HS 41 75 Tons
Membrane	0 None	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	1 Epoxy Coated Reinforci	66 Inv. Rating	HS 23 42 Tons
208 Dk Overburden	1 None	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2015 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	250 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	11.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	1 1 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	20 Ft.	90 Date of Last Inspection	November 26, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	56 Ft.	Other Special	N
49 Structure Length	168.00 Ft.	218 Channel Profile	Y 48 04/28/2016
50 Curb/Sidewalk Widths	1.3 Ft Rt-Side	Chaining Date	None
	1.3 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	11/09/2015
	30.0 Ft.	213 Federal Aid Project Number	BRO-0053(065)
52 Deck Width	32.5 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel, Ralphs
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 53-123-24.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	5,460	99	5,428	1	32	0	0	0	0
Notes:11/12/2015 - Over 3/4" dip at construction joint on deck. NW and SW curb on west approach panel formed incorrectly. 11/17- hairline cracks with efflorescence on underside of deck. - 11/26/2019										
1120/1:Efflorescence/Rust Staining	sq.ft	32	0	0	100	32	0	0	0	0
Notes:Efflorescence at cold joint - 11/26/2019										
510/1:Wearing Surfaces	sq.ft	1,679	95	1,595	5	84	0	0	0	0
3220/1:Crack (Wearing Surface)	sq.ft	84	0	0	100	84	0	0	0	0
104/3:Pre Clsd Box Girder	ft	672	100	672	0	0	0	0	0	0
210/3:Re Conc Pier Wall	ft	60	100	60	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	103	100	103	0	0	0	0	0	0
313/2:Fixed Bearing	each	16	100	16	0	0	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
321/3:Re Conc Approach Slab	sq.ft	1,273	100	1,273	0	0	0	0	0	0
Notes:Separation between concrete approach slab and asphalt on both ends - 11/26/2019										
331/3:Re Conc Bridge Railing	ft	336	100	336	0	0	0	0	0	0
Notes:Exposed reinforcing steel on NW edge of jersey barrier/deck. Vertical Crack in jersey barriers - 11/26/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-125-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	36.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	ELLISVILLE TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MUDDY RIVER	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	2 WEST 3 SOUTH ALAMO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 31' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 30' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	166622.5 5384594.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 20 36 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 11 20 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	206 Gravel/Dirt	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1920 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	3 Intolerable - Correct
29 ADT	24 30 Year of ADT 2017	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 08, 2017
32 Approach Roadway Width	14 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 12/03/2015
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	15.1 Ft.	Other Special	N
48 Length of Max Span	39 Ft.	218 Channel Profile	1 48 05/14/2019
49 Structure Length	41.01 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	15.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Donaldson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 53-125-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	624	83	518	17	106	0	0	0	0
113/2:Steel Stringer	ft	246	0	0	0	0	0	0	100	246
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
120/3:Steel Truss	ft	82	0	0	0	0	100	82	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
152/2:Steel Floor Beam	ft	33	0	0	0	0	100	33	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	33	0	0	0	0	0	0	100	33
330/3:Metal Bridge Railing	ft	82	0	0	0	0	67	55	33	27
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	82	0	0	100	82	0	0	0	0
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
7357/3:Pack Rust	each	1	0	0	100	1	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	0	0	0	0	0	0	100	1
8401/3:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: NBI Remarks: Minor exposure of piling in n.W. Corner of north abutment. N.E. And n.W. Wingwalls have moderate spalling and cracks. The east end of the north abutment has settled 0.6 ft. Low water x-ing 300 ft. Down- stream on private property. West railing is hanging loose. Moderate diagonal crack at jct. Of se wing and abutment. Center vertical support on west side has minor collision damage. Severe crack at jct. Of ne wing and abutment exposing top of piling in ne wingwall. The east end of the south abutment has settled two inches. Moderate cracks in top and bottom flange of outside channel of bottom chbrd of east truss at fastener locations. 11/19/2013 - Poor horizontal roadway alignment from the south. D-D section bent in from ice impact east side. 12/07/2016 - Posted NW/SE corners of structure. No end markers.

Alert Code 1: No end markers. Moderate crack in upper and lower flange of outside channel beam of east lower chord at bolt locations. Pack rust forming at most upper truss B-B connections. South abutment settling at SW corner.

Alert Code 3: 12/1/2015 - Severe ice damage to east lower chord and lateral side bracing.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-126-06.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	93.10	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	ROCK ISLAND TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	E FORK LITTLE MUDDY CRK	102 Direction of Traffic	2 2-way traffic
09 Location	2 WEST 2 SOUTH ALAMO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 32' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 30' 23.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	167447.5 5386883.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 27 50 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 16 30 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	24 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1966 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 21, 2019
32 Approach Roadway Width	21 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/14/2019
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.5 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.5 Ft Lt-Side	212 Structure Load Rated	09/19/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 53-126-06.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/3:Re Conc Opn Girder/Beam	ft	240	99	237	1	3	0	0	0	0
Notes:Random superficial cracks in bottom of all channel beams. - 11/21/2019										
1080/3:Delamination/Spall/Patched Area	ft	3	0	0	100	3	0	0	0	0
Notes:Minor spalls on outside edge of north channel beam. - 11/21/2019										
1120/3:Efflorescence/Rust Staining	ft	237	100	237	0	0	0	0	0	0
Notes:12/1/15- Minor Rust spots under all channel beams - 11/21/2019										
215/3:Re Conc Abutment	ft	49	80	39	20	10	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	24	100	24	0	0	0	0	0	0
Notes:Riprap placed in 1994. Minor scaling on both abutment faces. Minor scaling on both abutment footings with Moderate concrete deterioration, no exposed rebar. Moderate spalls in all end wall diaphragms on both abutments - 11/21/2019										
1130/3:Cracking (RC and Other)	ft	10	0	0	100	10	0	0	0	0
Notes:Minor vertical cracks in both abutment faces. - 11/21/2019										
6000/3:Scour	ft	15	100	15	0	0	0	0	0	0
Notes:11/17- moderate scaling on both abutment footings 11/19/2013 - Both footings exposed. - 11/21/2019										
331/3:Re Conc Bridge Railing	ft	59	0	0	100	59	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	59	0	0	100	59	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
Notes:12/07/2011 - Moderate erosion behind SE and NE wingwall. 11/19/2013 - Riprap placed at both south wings. - 11/21/2019										
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:Minor diagonal cracks in all wings. - 11/21/2019										

Remarks: 11/19-Fence along the south end of bridge blocking channel - 11/21/2019**Alert Code 1:** No bridge end markers. No railing. - 11/21/2019

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SEC 409

Structure Number: 53-127-09.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	83.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	ELLISVILLE TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MUDDY RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	4 SOUTH ALAMO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 30' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 28' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	169741.1 5382824.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	3 Bank Prot Failed
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	46 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	28 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	201 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1920 106 Yr Reconstructed	1950	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	5 Above Tolerable
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT	71 Waterway Adequacy	6 Equal Minimum
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	2 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	November 08, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	23.0 Ft.	Underwater	N
48 Length of Max Span	30 Ft.	Other Special	N
49 Structure Length	29.86 Ft.	218 Channel Profile	1 48 05/14/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	212 Structure Load Rated	06/26/2017
52 Deck Width	24.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, Donaldson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 53-127-09.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	689	83	572	17	117	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	11	100	11	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	43	0	0	100	43	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	361	0	0	100	361	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
215/3:Re Conc Abutment	ft	49	0	0	98	48	2	1	0	0
330/3:Metal Bridge Railing	ft	59	0	0	49	29	44	26	7	4
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	59	0	0	100	59	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Nonstandard end markers. Vechicle damage to west railing. 1 1/2" separation at joint where north and south abutments were widened. Moderate spalls with exposed rebar on underside of deck at center of span between first six beams from east 12/2011 - Minor concrete deterioration for full length of east curb. 11/19/2013 - Cattle fence pannels attached to east side W- beam guardrail. 12/1/2015- 6 & 7 Beam from east warped, guard rail on west side bend out. Separation on south abutment where widened has erosion behind 2'

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SEC 409

Structure Number: 53-127-18.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	DUBLIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	E FORK LITTLE MUDDY CRK	102 Direction of Traffic	2 2-way traffic
09 Location	14 SOUTH ALAMO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 22' 54.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 28' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	168889.5 5368400.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	8 Very Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	8 Protected
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 38 69 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 35 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1976 106 Yr Reconstructed -1	67 Structural Condition	7 Above Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	100 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 25, 2019
32 Approach Roadway Width	27 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.9 Ft.	Other Special	N
48 Length of Max Span	40 Ft.	218 Channel Profile	1 48 05/09/2019
49 Structure Length	41.99 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.5 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.5 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	28.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	29.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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SEC 409

Structure Number: 53-127-18.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/3:Pre Opn Conc Girder/Beam	ft	335	99	331	1	4	0	0	0	0
1080/3:Delamination/Spall/Patched Area	ft	4	0	0	100	4	0	0	0	0
Notes:Minor spalls on top of first t-beam from east, at se corner. - 7/25/2019										
215/3:Re Conc Abutment	ft	59	42	25	58	34	0	0	0	0
Notes:Minor diagonal cracks in diaphragm at junction of wing and abutment, typical of all four corners. - 7/25/2019										
1080/3:Delamination/Spall/Patched Area	ft	25	0	0	100	25	0	0	0	0
Notes:11/17- delaminating concrete on North Abutment - 7/25/2019										
1130/3:Cracking (RC and Other)	ft	9	0	0	100	9	0	0	0	0
Notes:Minor random cracks in both abutments. - 7/25/2019										
331/3:Re Conc Bridge Railing	ft	85	69	59	6	5	0	0	25	21
1080/3:Delamination/Spall/Patched Area	ft	64	92	59	8	5	0	0	0	0
Notes:Minor spalls in both curbs. - 7/25/2019										
7000/3:Damage	ft	21	0	0	0	0	0	0	100	21
Notes:11/17- East curb is all 1/2 off bridge,remaining east curb is being pushed out. - 7/25/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
Notes:Additional loose rock riprap placed in 1994. - 7/25/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	100	4	0	0	0	0	0	0
Notes:Minor diagonal cracks in all wingwalls. - 7/25/2019										

Remarks: Nonstandard end markers. - 7/25/2019

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SEC 409

Structure Number: 53-128-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	27.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	ELLISVILLE TOWNSHIP	37 Historical Significance	2 Br eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MUDDY RIVER	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	1 EAST 3 SOUTH ALAMO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 31' 39.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 27' 02.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	171460.9 5384505.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	3 Serious
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 21 38 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 13 24 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1920 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	2 Intolerable - Replace
29 ADT	20 30 Year of ADT 2017	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 08, 2017
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	Y 24 12/01/2015
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	15.1 Ft.	Other Special	N
48 Length of Max Span	39 Ft.	218 Channel Profile	1 48 05/14/2019
49 Structure Length	41.01 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/10/2012
51 Bridge Rdwy Width - Curb to Curb	15.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Donaldson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 53-128-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	635	83	527	17	108	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	11	100	11	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	43	0	0	100	43	0	0	0	0
113/2:Steel Stringer	ft	246	0	0	0	0	0	0	100	246
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
120/3:Steel Truss	ft	82	0	0	0	0	100	82	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
152/2:Steel Floor Beam	ft	33	0	0	0	0	100	33	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	33	0	0	0	0	100	33	0	0
330/3:Metal Bridge Railing	ft	82	0	0	0	0	50	41	50	41
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	82	0	0	100	82	0	0	0	0
4000/3:Settlement	each	1	0	0	100	1	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
7357/3:Pack Rust	each	1	0	0	100	1	0	0	0	0
7362/1:Superstructure Traffic Impact	each	1	0	0	0	0	0	0	100	1
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 12/2011 - Minor exposure of piling on both abutments. Minor scour under structure. Minor spalls on underside of deck with exposed rebar. East railing severely damaged for entire length. Minor vertical cracks in both abutment faces. Minor diagonal cracks in all wingwalls. Low water crossing installed downstream on private land.
11/20/2013 - Structure posted 10 ton on both ends. 11/2014- NE corner of structure appears to be settling.

Alert Code 1: Minor exposure of piling on both abutments. Severe ice damage to upstream truss members. Minor scour under structure. 11/20/2013 - pack rust forming upper truss connection plates.

Alert Code 3: 12/2011 - Severe ice damage to upstream side lateral bracing and lower chord connections to floor beams. Minor cracks in upper flange of east lower chord at bolt connections. Tension rod cross bracing severely damaged. 11/20/2013 - Structure appears to be settling at the NW corner.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-128-17.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	21.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	DUBLIN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	E FORK LITTLE MUDDY CRK	102 Direction of Traffic	2 2-way traffic
09 Location	13 SOUTH ALAMO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 23' 14.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 27' 57.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	169404.5 5368984.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 0 0 Tons
108 Wearing Surface	7 Wood or Timber	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 0 0 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	44 Other	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1921 106 Yr Reconstructed -1	67 Structural Condition	0 Closed
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	7 Above Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	6 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 20, 2019
32 Approach Roadway Width	20 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 06/20/2019
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.4 Ft.	Other Special	N
48 Length of Max Span	39 Ft.	218 Channel Profile	Y 48 08/03/2015
49 Structure Length	41.99 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 53-128-17.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	732	94	688	6	44	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	11	100	11	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	43	0	0	100	43	0	0	0	0
113/2:Steel Stringer	ft	253	0	0	0	0	0	0	100	253
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
120/3:Steel Truss	ft	85	0	0	0	0	100	85	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
152/2:Steel Floor Beam	ft	39	0	0	0	0	100	39	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	36	0	0	0	0	0	0	100	36
330/3:Metal Bridge Railing	ft	85	0	0	0	0	100	85	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	85	0	0	100	85	0	0	0	0
7357/3:Pack Rust	each	1	0	0	100	1	0	0	0	0
7362/3:Superstructure Traffic Impact	each	1	0	0	100	1	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: 9/12/2007 - NBI Remarks: The lateral side bracing at the NW corner has minor ice damage. The upstream ends of the floor beams have minor ice damage. The lateral side bracing at the NE corner has ice damage. There is two feet of piling exposed on all of west abutment and NW wing. No end markers. Minor vertical cracks and spalls in both abutments with exposed rebar. Minor diagonal cracks in all wingwalls. The NW and SW wingwalls have moderate vertical cracks. The NW wingwall is breaking apart at top. Minor spalls with exposed rebar on underside of deck. Moderate rust on truss members. The east abutment was repoured to settlement of NE corner. Riprap placed in 1995. A low water crossing has been constructed 300' upstream on private land. Low water crossing being used for now for trucks to the North. 11/2012 - No End Markers. Oil Company has placed timber and steel pads on deck for driving surface. 4" thick x 39' long by 16' wide. Each pad is 8' wide. Total weight unknown. 11/20/2013 - Some pack rust on upper truss connection plates. Structure posted 20 tons both ends. 11/2014- Road/Bridge is not closed there is a truck route available to the North. Advised county they may want to reduce the weight limit due to the damage 08/03/2015 - Bridge closed by county due to damages to timber deck. 12/1/15- Bridge closed, signs in place. Low water crossing in place. 11/17- bridge closed 6/19- Bridge Closed - 6/20/2019

Alert Code 3: The NW vertical floor beam support has 50 percent failure. Was welded/repared in 2008 or 2009. - 6/20/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-128-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	57.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	PRINGBROOK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	STONY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH SPRING BROOK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 14' 29.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 28' 17.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	168059.7 5352787.4	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Concrete continuous	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 55 99 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 20 38 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1920 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	12 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	March 01, 2018
32 Approach Roadway Width	12 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.7 Ft.	Other Special	N
48 Length of Max Span	40 Ft.	218 Channel Profile	1 48 05/15/2019
49 Structure Length	83.99 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.7 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 53-128-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,432	85	1,217	15	215	0	0	0	0
110/2:Re Conc Opn Girder/Beam	ft	335	0	0	99	332	1	3	0	0
210/3:Re Conc Pier Wall	ft	20	0	0	0	0	100	20	0	0
215/3:Re Conc Abutment	ft	39	0	0	0	0	100	39	0	0
331/3:Re Conc Bridge Railing	ft	167	0	0	96	161	4	6	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0

Remarks: 9/10/2007 - Minor scour at east abutment. NBI Remarks: North railing broken out for six feet at east end. Minor vertical cracks in abutments. the ne wingwall has large spall at water line. the ice nose at north end of pier wall has minor damage. Minor erosion behind southeast wing. 11/20/2013 - poor channel alignment from the north. Cattle fence placed at south side span #1. 11/17-Moderate cracks in abutments. No end Markers. Cracks and Efflorescence in bottom of deck 3/1/18- Water and ice sitting on east 1/2 of deck.

Alert Code 1: Severe erosion behind n.e. wing. Moderate Erosion behind SE and NW wing numerous random superficial cracks in all beams. minor spalls with exposed rebar in first beam from north in west span, in first beam from north in east span and in first beam from south in east span.nonstandard end markers. 3 BEM's missing.

Alert Code 2: Severe vertical crack with moderate spalls and exposed rebar in pier wall at south end,extends through wall.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-128-32.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	73.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	TWELVE MILE TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	STOCKYARD CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	6 SOUTH SPRINGBROOK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 10' 08.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 28' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	167567.4 5344754.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	—	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	B Posting Recommended
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	61 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	37 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	31 Tons
Age and Service		Appraisal	
27 Yr Built	1920 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	6 Equal Minimum
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 26, 2019
32 Approach Roadway Width	13 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	14.8 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/14/2019
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	15.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-128-32.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	452	0	0	97	438	0	0	3	14
Notes:center of deck 4 foot long spall with exposed rebar. Minor spalling with exposed rebar on underside of deck. 11/20/2013 - Concrete deterioration with section loss up to 3" lower portion of east abutment 11/17-Map cracking on deck typical - 6/26/2019										
1090/1:Exposed Rebar	sq.ft	14	0	0	0	0	0	0	100	14
1130/1:Cracking (RC and Other)	sq.ft	438	0	0	100	438	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	240	0	0	0	0	100	240	0	0
1000/2:Corrosion	ft	240	0	0	0	0	100	240	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	33	0	0	82	27	18	6	0	0
Notes:Both Abutments have moderate scaling with exposed rebar. Both Abutments have minor vertical cracks. 11/17- West abutment NE corner pile is exposed - 6/26/2019										
1080/3:Delamination/Spall/Patched Area	ft	27	0	0	100	27	0	0	0	0
1090/3:Exposed Rebar	ft	6	0	0	0	0	100	6	0	0
330/2:Metal Bridge Railing	ft	59	0	0	0	0	100	59	0	0
Notes:11/20/2013 -Vehicle damage to south side metal railing. - 6/26/2019										
7000/2:Damage	ft	59	0	0	0	0	100	59	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/2:Re Conc Bridge Railing	ft	59	0	0	85	50	15	9	0	0
Notes:11/20/2013 - Areas of spalling, concrete deterioration both curbs. 11/20/2013 Large spall on N curb, - 6/26/2019										
1190/2:Abrasion(PSC/RC)	ft	59	0	0	85	50	15	9	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	50	2	50	2	0	0
Notes:11/20/2013 - Concrete deterioration with section loss up to 3" lower portion SW wing with 1 exposed pile. 6/2019- NW wind has exposed pile, - 6/26/2019										
1130/3:Cracking (RC and Other)	each	4	0	0	50	2	50	2	0	0

Remarks: 12/2011 - End markers down at NE, NW and SW corners. 6/2019- posted weight sign down on both side. - 6/26/2019

Alert Code 1: 11/20/2013 - Concrete deterioration with section loss up to 3" lower portion of east abutment and SW wing with 1 exposed pile. Large spall on N curb, and posted tons down on both side. - 6/26/2019

Alert Code 2: 11/17- West abutment NE corner pile is exposed center of deck 4 foot long spall with exposed rebar. - 6/26/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-129-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	38.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	ELLISVILLE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MUDDY RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	2 EAST 3 SOUTH ALAMO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 31' 42.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 25' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	172935.2 5384493.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Due to the absence of plans, design calculations, or other information)
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 18 33 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 11 21 Tons
Dk Protect	None	70 Bridge Posting	4 0.1-9.9%below
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	14 Tons
Age and Service		Appraisal	
27 Yr Built	1925 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	2 Intolerable - Replace
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	3 Intolerable - Correct
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 25, 2019
32 Approach Roadway Width	10 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	Y 24 07/25/2019
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	17.4 Ft.	Other Special	N
48 Length of Max Span	39 Ft.	218 Channel Profile	1 48 05/14/2019
49 Structure Length	41.01 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	12/05/2013
51 Bridge Rdwy Width - Curb to Curb	17.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 53-129-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	710	83	589	17	121	0	0	0	0
1090/1:Exposed Rebar	sq.ft	121	0	0	100	121	0	0	0	0
Notes:Minor spalls with exposed rebar on underside of deck. - 7/25/2019										
113/2:Steel Stringer	ft	246	0	0	0	0	0	0	100	246
1000/2:Corrosion	ft	246	0	0	0	0	0	0	100	246
Notes:Stingers rusting with section loss and pack rust - 7/25/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
120/3:Steel Truss	ft	82	0	0	0	0	100	82	0	0
1000/3:Corrosion	ft	80	0	0	0	0	100	80	0	0
1900/3:Distortion	ft	2	0	0	0	0	100	2	0	0
Notes:Moderate ice damage to lateral bracing on upstream side. - 7/25/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
152/2:Steel Floor Beam	ft	39	0	0	0	0	100	39	0	0
1000/2:Corrosion	ft	34	0	0	0	0	100	34	0	0
1900/2:Distortion	ft	5	0	0	0	0	100	5	0	0
Notes:Minor deflection in north floor beam. - 7/25/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	36	0	0	0	0	100	36	0	0
Notes:minor hole in roadway behind abutment at n.w. corner. Large hole behind South Abutment, 3 feet deep - 7/25/2019										
6000/3:Scour	ft	36	0	0	0	0	100	36	0	0
Notes:One ft. of piling exposed on both abutments 11/20/2013 - Undermining of the north and south abutment exposing abutment piles. Minor scaling on both abutment faces. Minor vertical cracks in both abutments. 12/2011 - Severe scaling at base of both abutments. - 7/25/2019										
330/3:Metal Bridge Railing	ft	82	0	0	0	0	100	82	0	0
1000/3:Corrosion	ft	82	0	0	0	0	100	82	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	82	0	0	100	82	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	82	0	0	100	82	0	0	0	0
8398/3:Slope Protection	each	2	0	0	50	1	0	0	50	1
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
Notes:Minor erosion behind northwest wing. 11/17-erosion behind SE wingwall - 7/25/2019										
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0
Notes:Minor diagonal cracks in all wing walls. - 7/25/2019										

Remarks: Minor hole in roadway behind abutment at n.w. corner. Large hole behind South Abutment, 3 feet deep - 7/25/2019 Bridge closed sign at the North End on fence, but no closure up at the bridge. - 7/25/2019

Alert Code 1: One ft. of piling exposed on both abutments minor hole in roadway behind backwall at n.w. corner. - 7/25/2019

Alert Code 2: 11/20/2013 - Undermining of the north and south abutment exposing abutment piles. - 7/25/2019

Fracture Critical: Moderate ice damage to lateral bracing on upstream side. - 7/25/2019

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Structure Number: 53-130-26.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	96.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Major Collector
04 City	PRINGBROOK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05328 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	STONY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH 3 WEST OF EPPING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	12.298	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 15' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 25' 52.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	171135.8 5354218.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 44 80 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 23 43 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1980 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	9 Relief for waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	250 30 Year of ADT 2019	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	5 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 26, 2019
32 Approach Roadway Width	28 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	27.9 Ft.	Other Special	N
48 Length of Max Span	30 Ft.	218 Channel Profile	N
49 Structure Length	33.14 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	27.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	32.2 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Structure Number: 53-130-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
109/2:Pre Opn Conc Girder/Beam	ft	262	92	242	8	20	0	0	0	0
Notes:Numerous minor popouts on driving surface of t-beams. Some spalling at joints on driving surface - 6/26/2019										
1080/2:Delamination/Spall/Patched Area	ft	20	0	0	100	20	0	0	0	0
215/3:Re Conc Abutment	ft	66	11	7	89	59	0	0	0	0
Notes:Typical cracking throughout both abutments. No faulting present. Spalling at top of East abutment - 6/26/2019										
1080/3:Delamination/Spall/Patched Area	ft	10	0	0	100	10	0	0	0	0
1130/3:Cracking (RC and Other)	ft	49	0	0	100	49	0	0	0	0
330/3:Metal Bridge Railing	ft	66	100	66	0	0	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/3:Re Conc Bridge Railing	ft	66	100	66	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Minor diagonal cracks in southwest wing. - 6/26/2019										

Remarks: Structure is on the Epping dam and has a concrete spillway. Minor vertical cracks with minor efflorescence in drip inlet walls. - 6/26/2019

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Structure Number: 53-131-08.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	26.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	RAINBOW TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MUDDY RIVER	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	4 EAST 3 SOUTH ALAMO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 31' 46.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 23' 08.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	176254.8 5384427.6	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	3 Serious
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	K Closed to all traffic
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 17 32 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 10 19 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	23 Gravel/Dirt	209 Posted in "Tons"	10 Tons
Age and Service		Appraisal	
27 Yr Built	1914 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	3 Intolerable - Correct
29 ADT	20 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 02, 2019
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	15.1 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 09/15/2015
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	15.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Ralphs
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 53-131-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	463	95	440	5	23	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	23	0	0	100	23	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	240	0	0	63	150	13	30	25	60
1000/2:Corrosion	ft	180	0	0	83	150	17	30	0	0
1900/2:Distortion	ft	60	0	0	0	0	0	0	100	60
Notes:Severe ice damage to east outside channel beam and third stringer from east side. Second stringer from the east had moderate damage. - 5/2/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	33	0	0	0	0	52	17	49	16
1080/3:Delamination/Spall/Patched Area	ft	16	0	0	0	0	0	0	100	16
Notes:There are 2 3' x 2' holes entirely through abutment at east and west end of south abutment at base of wall. - 5/2/2019										
1130/3:Cracking (RC and Other)	ft	17	0	0	0	0	100	17	0	0
Notes:Minor vertical and diagonal cracks on abutments. - 5/2/2019										
331/3:Re Conc Bridge Railing	ft	59	0	0	100	59	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	59	0	0	100	59	0	0	0	0
7362/3:Superstructure Traffic Impact	each	1	0	0	100	1	0	0	0	0
8398/3:Slope Protection	each	2	50	1	0	0	50	1	0	0
6000/3:Scour	each	1	0	0	0	0	100	1	0	0
8401/3:Wings	each	4	0	0	0	0	100	4	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	0	0	100	4	0	0
Notes:Minor vertical and diagonal cracks on wings. Severe diagonal crack with spalls in SE wingwall. - 5/2/2019										

Remarks: Low water crossing installed 200 ft. Downstream. 11/20/2013 - Structure posted narrow bridge, weight limit 10 tons north end only, vehicle damage to south end signs. 6/26/2017 - Bridge Division re-rated structure but still reduced overall rating by 40% because of ice damage to 3 beams. (could be unrestricted if beams are straightened) 11/17- Detour signs posted directing traffic to low water crossing 6/19/2018 - Bridge closed due to approach washed out. - 5/2/2019

Alert Code 1: No railing. - 5/2/2019

Alert Code 3: Severe ice damage to east outside channel beam and third stringer from east side. Second stringer from east has moderate damage. South abutment has severe scaling with two foot of piling exposed and severe exposure of rebar with up to 1" section loss lower half, hole in the back wall. north abutment has severe scaling with one foot of piling exposed and moderate exposure of rebar. holes in the back wall. - 5/2/2019

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Structure Number: 53-133-08.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	75.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Major Collector
04 City	RAINBOW TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05333 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MUDDY RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	6 EAST 4 SOUTH ALAMO	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	38.992	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 31' 05.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 20' 30.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	179421.0 5383000.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	44 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	27 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	32 Asphalt	209 Posted in "Tons"	23 Tons
Age and Service		Appraisal	
27 Yr Built	1960 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	145 30 Year of ADT 2019	72 App. Rdwy. Alignment	3 Intolerable - Correct
109 Average Daily Truck Traffic	12.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 25, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	15.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/14/2019
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Structure Number: 53-133-08.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	689	92	633	6	41	2	15	0	0
1090/1:Exposed Rebar	sq.ft	15	0	0	0	0	100	15	0	0
Notes:Minor spalls with exposed rebar on underside of deck at both outside edges.Minor spall at NW and SE corner of deck with exposed rebar. - 7/25/2019										
1120/1:Efflorescence/Rust Staining	sq.ft	11	100	11	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	41	0	0	100	41	0	0	0	0
510/1:Wearing Surfaces	sq.ft	689	95	655	5	34	0	0	0	0
3220/1:Crack (Wearing Surface)	sq.ft	34	0	0	100	34	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	299	0	0	100	299	0	0	0	0
1000/2:Corrosion	ft	284	0	0	100	284	0	0	0	0
Notes:rusting on all beams - 7/25/2019										
1900/2:Distortion	ft	15	0	0	100	15	0	0	0	0
Notes:11/17- west outside beam bowed in at 2 locations - 7/25/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	49	0	0	0	0	80	39	20	10
1080/3:Delamination/Spall/Patched Area	ft	39	0	0	0	0	100	39	0	0
Notes:South abutment has minor spalling with exposed rebar. Minor diagonal and vertical cracks in abutments. - 7/25/2019										
6000/3:Scour	ft	10	0	0	0	0	0	0	100	10
Notes:Both abutments have minor undermining along face. - 7/25/2019										
330/3:Metal Bridge Railing	ft	59	0	0	100	59	0	0	0	0
Notes:No safety ends on w-beam railing - 7/25/2019										
1000/3:Corrosion	ft	59	0	0	100	59	0	0	0	0
Notes:rusting on all railing supports - 7/25/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	100	100	0	0	0	0
331/3:Re Conc Bridge Railing	ft	59	0	0	83	49	0	0	17	10
1080/3:Delamination/Spall/Patched Area	ft	10	0	0	0	0	0	0	100	10
Notes:East curb falling apart for 10 feet - 7/25/2019										
1190/3:Abrasion(PSC/RC)	ft	49	0	0	100	49	0	0	0	0
Notes:All Curb has weathering - 7/25/2019										
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	75	3	25	1	0	0	0	0
Notes:Minor diagonal and vertical cracks in wings. Moderate diagonal crack in southwest wing wall at top. - 7/25/2019										

Remarks: 11/20/2013 - Poor horizontal roadway alignment. - 7/25/2019

Alert Code 1: 11/17- west outside beam bowed in at 2 locations - 7/25/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-133-25.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	47.80	20 Toll	3 On free road
Identification		21 Maint Responsibility	27 Railroad
02 Highway District	Williston District	22 Owner	27 Railroad
03 County	Williams	26 Functional	Rural, Major Collector
04 City	EPPING CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05333 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BN RR TRACKS	102 Direction of Traffic	2 2-way traffic
09 Location	AT EPPING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	22.995	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 16' 58.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 21' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	176873.8 5356896.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	7 Good
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Wood or Timber	61 Chan. & Chan. Protection	N N/A (NBI)
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	7	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 12 21 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 6 12 Tons
Dk Protect	None	70 Bridge Posting	1 30.0-39.9%below
208 Dk Overburden	1 None	209 Posted in "Tons"	12 Tons
Age and Service		Appraisal	
27 Yr Built	1959 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	2 Railroad - Under	69 Underclear. Vert & Horiz	4 Tolerable
28 Lanes on Structure	2	71 Waterway Adequacy	N Not applicable
29 ADT	100 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	8.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	26 Miles	113 Scour Critical	N Not Over Waterway
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 26, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.0 Ft.	Other Special	N
48 Length of Max Span	31 Ft.	218 Channel Profile	N
49 Structure Length	138.12 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel
54 Min Vert Underclearance	23 Ft. 1 In.	Navigation Data	
	R Railroad beneath struc	38 Navigation Control	NA-no waterway
55 Min Lateral UnderClear. - Rt	8.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	R Railroad beneath struc	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-133-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	3,315	95	3,149	5	166	0	0	0	0
Notes:Minor transverse cracks in deck. - 6/26/2019										
1130/1:Cracking (RC and Other)	sq.ft	166	0	0	100	166	0	0	0	0
111/2:Timber Open Girder	ft	2,031	96	1,947	0	0	0	0	4	84
Notes:The third stringer from the east in the third span from the south has 100% failure. The fourth stringer from the west in the third span from the north has 100% failure. 4th stringer from the west in the middle span North end has a crack. - 6/26/2019										
1160/2:Crack (Timber)	ft	84	0	0	0	0	0	0	100	84
206/2:Timber Column	each	38	97	37	0	0	0	0	3	1
Notes:Severe collision damage to NE piling of center span, the piling is nonfunctional. The railroad has made repairs to the failed piling by splicing a 12" x12" timber over the failed area. The first piling to the west from the NE one sustained minor damage. Minor collision damage to 1st beam from west in center span minor splits & checks in all timber elements. - 6/26/2019										
7000/2:Damage	each	1	0	0	0	0	0	0	100	1
215/2:Re Conc Abutment	ft	56	50	28	50	28	0	0	0	0
Notes:South abutment has moderate spall on beam seat under 7th beam from west side. 11/17- 0.5-1 foot of undermining on north abutment with one foot of pile exposed, concrete abutment is not resting on any soil. - 6/26/2019										
6000/2:Scour	ft	28	0	0	100	28	0	0	0	0
235/2:Timber Pier Cap	ft	157	100	157	0	0	0	0	0	0
330/3:Metal Bridge Railing	ft	276	0	0	100	276	0	0	0	0
Notes:Minor Rusting - 6/26/2019										
1000/3:Corrosion	ft	276	0	0	100	276	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	50	50	50	50	0	0	0	0
331/3:Re Conc Bridge Railing	ft	276	100	276	0	0	0	0	0	0
8401/2:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Poor sight distance. cross bracing on 3rd pair bent from south, diagonal bracing has 100% failure - 6/26/2019

Alert Code 2: The third stringer from the east in the third span from the south has 100% failure. The fourth stringer from the west in the third span from the north has 100% failure. Minor transverse cracks in deck. Severe collision damage to NE piling of center span, the piling is nonfunctional. 4th stringer from the west in the middle span North end has a crack. - 6/26/2019

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-133-26.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Major Collector
04 City	PRINGBROOK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05333 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	STONY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 SOUTH OF EPPING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	20.996	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 15' 40.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 21' 22.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	176734.1 5354502.2	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2017 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	7 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	28 Ft.	90 Date of Last Inspection	February 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	30.0 Ft.	Underwater	N
48 Length of Max Span	13 Ft.	Other Special	N
49 Structure Length	46.00 Ft.	218 Channel Profile	0 0
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	12/05/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	COIB-5333(061)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, Peebles
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
TRIPLE 14 X 12 X 120' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-133-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/1:Re Conc Culvert	ft	360	100	360	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 10/31/17- Bridge has been replaced with a box culvert 2/19/19- Small Spalls are some lift holes

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-134-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	34.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	RAINBOW TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MUDDY RIVER	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	9 SOUTH CORINTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 29' 43.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 19' 13.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	180864.5 5380366.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 15 28 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 9 17 Tons
Dk Protect	None	70 Bridge Posting	3 10.0-19.9%below
208 Dk Overburden	205 Gravel/Dirt	209 Posted in "Tons"	17 Tons
Age and Service		Appraisal	
27 Yr Built	1935 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	6 Equal Minimum
29 ADT	24 30 Year of ADT 2017	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 09, 2017
32 Approach Roadway Width	15 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	Y 24 12/01/2015
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	14.8 Ft.	Other Special	N
48 Length of Max Span	79 Ft.	218 Channel Profile	1 48 05/14/2019
49 Structure Length	81.04 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.7 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.7 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	15.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.4 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Donaldson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 53-134-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	1,216	63	766	36	441	0	0	1	9
1120/1:Efflorescence/Rust Staining	sq.ft	11	100	11	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	205	0	0	100	205	0	0	0	0
113/2:Steel Stringer	ft	486	0	0	0	0	0	0	100	486
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
120/3:Steel Truss	ft	161	0	0	0	0	100	161	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
152/2:Steel Floor Beam	ft	72	0	0	0	0	100	72	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	33	0	0	0	0	0	0	100	33
330/3:Metal Bridge Railing	ft	161	0	0	0	0	93	150	7	11
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	161	0	0	88	141	12	20	0	0
7357/3:Pack Rust	each	1	100	1	0	0	0	0	0	0
8398/3:Slope Protection	each	2	50	1	50	1	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0

Remarks: 1/17/2006 - 359 - Soffit Smartflag - Soffit has numerous spalls with exposed rebar showing active corrosion. 9/12/2007 - pack rust present at most connections and between some cover plates. NBI Remarks: Deck has moderate spalling with exposed rebar. Sw wing has one piling exposed & diagonal cracking. Lateral bracing on east side has moderate ice damage. Minor diagonal and vertical cracks on abutments and wings. Low water crossing 400 ft. Downstream. County placed riprap. The low water crossing is on private property. The west and east curb has severe deterioration with exposed rebar for 10 feet. Lateral bracing at 1st floor beam from n has severe ice damage on east side. 1" crack top of south abutment. Both wings. Pack rust distorting bottom chord coverplates. 11/18/2013 - Posted narrow bridge both ends. 12/1/2015- North abutment west side has erosion. 11/17- detour signs posted pointing to low water crossing.

Alert Code 1: No end markers. South abutment has 5 piling exposed 2' & 2 piling exposed 5'.

Alert Code 2: Severe damage to west end of south abutment with exposed piling and rebar. Severe scaling at east end of south abutment with exposed rebar and piling with some undermining of the south abutment.

Alert Code 3: There is a 2+' x 2+' hole in the underside of the deck with exposed rebar at the second floor beam from the north.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-134-25.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	33.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Major Collector
04 City	BROOKLYN TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	STONY CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	1 SOUTH OF EPPING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 16' 13.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 20' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	177454.8 5355476.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	4 Poor
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 29 53 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 17 32 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	202 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1930 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	3 Intolerable - Correct
29 ADT	24 30 Year of ADT 2018	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	7 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	March 01, 2018
32 Approach Roadway Width	10 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	14.8 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/10/2019
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	15.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 53-134-25.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	355	46	163	17	60	37	132	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	11	100	11	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	129	0	0	0	0	100	129	0	0
107/2:Steel Opn Girder/Beam	ft	194	0	0	0	0	100	194	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	33	0	0	0	0	100	33	0	0
331/3:Re Conc Bridge Railing	ft	49	0	0	0	0	100	49	0	0
8401/3:Wings	each	4	0	0	75	3	0	0	25	1

Remarks: NBI Remarks: 11/20/2013 - Posted narrow bridge both ends. 1/13/2016- Moderate random cracks in both abutments and all wingwalls. 10/31/17- need ice to complete inspection

Alert Code 1: No railing or end markers. Moderate spalling on underside of deck at east abutment and along north and south edge with exposed rebar. Severe erosion at behind the nw abutment corner of structure.

Alert Code 2: Severe scaling on backwalls with piling and rebar exposed half way up the walls, measured 3.5 feet from deck. The N.W. Wing has broken away from the abutment and is no longer in place

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-134-26.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	100.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	BROOKLYN TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	STONY CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	2 SOUTH OF EPPING	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 15' 21.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 20' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	177834.4 5353839.1	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	7 Minor Damage
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	7 Minor Deterioration
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 33 59 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 19 36 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	33 Tons
27 Yr Built	1979 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	100 30 Year of ADT 2019	71 Waterway Adequacy	7 Above Minimum
109 Average Daily Truck Traffic	12.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	4 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	30 Ft.	90 Date of Last Inspection	February 19, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	29.9 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	33.14 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	SOS-53(1)
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, Peebles
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
DOUBLE, 14X7X48' PRECAST RCB		116 Minimum Navigation Vertical Clearance	-1 Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-134-26.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/3:Re Conc Culvert Precast	ft	95	93	88	7	7	0	0	0	0
Notes: _										
8398/3:Slope Protection	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Culvert has had repair on upstream wings damaged by ice. Ice nose is missing the protective steel covering. Numerous minor diagonal cracks in s.E. And s.W. Wings. Minor concrete deterioration in both parapets. Minor spall with exposed rebar at north end of east barrel on west wall. Minor spalls around anchor studs for missing ice nose steel cover. Numerous random hairline cracks in ceiling of both barrels. The 3rd section from the south in the east barrel has minor scaling on walls. Minor spalls on all barrel section joints. 11/20/2013 - Rock placed at bank erosion areas both north wings. west channel bank erosion downstream. 2/12/19-east barrel NE side has exposed rebar

Alert Code 1: 11/20/2013 - 1' of scour hole just off the south end of culvert extending the width of the floor.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-135-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	74.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	RAINBOW TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LITTLE MUDDY RIVER	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 7 SOUTH OF CORINTH	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 29' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 17' 55.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	182487.9 5380761.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	4 Protection Undermined
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 26 47 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 15 28 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	201 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1925 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	4 Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	20 30 Year of ADT 2017	72 App. Rdwy. Alignment	3 Intolerable - Correct
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 09, 2017
32 Approach Roadway Width	16 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	18.7 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/14/2019
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.5 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.5 Ft Lt-Side	212 Structure Load Rated	06/26/2017
51 Bridge Rdwy Width - Curb to Curb	19.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	20.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Donaldson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 53-135-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	570	95	542	5	28	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	269	0	0	100	269	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	39	0	0	100	39	0	0	0	0
330/3:Metal Bridge Railing	ft	59	0	0	0	0	100	59	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	59	0	0	100	59	0	0	0	0
6000/3:Scour	each	1	0	0	0	0	100	1	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: NBI Remarks: Stringers have moderate rust. minor vertical and diagonal cracks on abutments and wings. Minor erosion behind all wingwalls. Random hairline cracks in deck, visible underneath. Non-standard end markers. Minor spalls on underside of deck. 12/2011 - Moderate scaling at base of both abutments. 11/20/2013 - No BEM s. Posted narrow bridge, reverse curve arrow north end only, south end signs are down. Poor channel alignment to the east. 12/1/2015- NE corner of North abutment undermined 1 foot.

Alert Code 1: South abutment beginning to undermine, some riprap has been placed. Moderate Scour under structure. 11/20/2013 - Scour hole in channel 30 x 40 x 3.5 ft deep.

Alert Code 2: 11/17- minor to moderate cracking in abutments and wings. NE corner of N Abutment not undermined 2'x 5' with exposed piling. S Abutment undermined at center 1' x 4'

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-137-37.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	92.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Major Collector
04 City	TRUAX TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05333 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	LONG CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	12 SOUTH OF WHEELOCK	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	4.999	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 06' 25.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 15' 41.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	182815.9 5336978.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	56 Tons
108 Wearing Surface	6 Bituminous	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	34 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	34 Asphalt	209 Posted in "Tons"	32 Tons
Age and Service		Appraisal	
27 Yr Built	1968 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	7 Above Minimum
29 ADT	130 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	13.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	8 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 14, 2019
32 Approach Roadway Width	21 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.9 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/14/2019
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.5 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.5 Ft Lt-Side	212 Structure Load Rated	06/27/2017
51 Bridge Rdwy Width - Curb to Curb	24.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-137-37.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	753	95	715	5	38	0	0	0	0
1090/1:Exposed Rebar	sq.ft	38	0	0	100	38	0	0	0	0
Notes:11/22/2013 - Honeycomb with exposed rebar in underside of deck between 1st and 2nd beams from west. - 11/14/2019										
510/1:Wearing Surfaces	sq.ft	753	95	715	5	38	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	390	0	0	100	390	0	0	0	0
1000/2:Corrosion	ft	390	0	0	100	390	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	52	0	0	100	52	0	0	0	0
Notes:Both abutments have minor spalling at waterline. Hairline vertical cracks in both abutments. County placed riprap in 1996. 11/22/2013 -Both abutment footings exposed. Some riprap displaced. - 11/14/2019										
6000/3:Scour	ft	52	0	0	100	52	0	0	0	0
330/2:Metal Bridge Railing	ft	59	0	0	100	59	0	0	0	0
Notes:No safety ends on w-beam railing. - 11/14/2019										
1000/2:Corrosion	ft	59	0	0	100	59	0	0	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/2:Re Conc Bridge Railing	ft	59	0	0	58	34	0	0	42	25
1090/2:Exposed Rebar	ft	25	0	0	0	0	0	0	100	25
Notes:11/18/15- Concrete rail/curb on west has 5' of exposed rebar 11/17- 10' of exposed rebar on west curb 11/19- 10' of exposed rebar East Curb - 11/14/2019										
1190/2:Abrasion(PSC/RC)	ft	34	0	0	100	34	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
2210/3:Movement	each	2	0	0	100	2	0	0	0	0
Notes:Rip Rap has been displaced at abutments - 11/14/2019										
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Hairline diagonal cracks in all wings. - 11/14/2019										

Remarks: 11/22/2013 - Bump at bridge ends. - 11/14/2019**Alert Code 1:** 11/22/2013 - Honeycomb with exposed rebar in underside of deck between 1st and 2nd beams from west. - 11/14/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-146-22.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	52.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	WEST BANK TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	3 EAST 2 SOUTH RAY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 18' 48.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 04' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	197742.7 5359146.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 29 52 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 17 31 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	20 Tons
Age and Service		Appraisal	
27 Yr Built	1924 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 24, 2019
32 Approach Roadway Width	15 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.7 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/13/2019
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/27/2017
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 53-146-22.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	506	63	319	37	187	0	0	0	0
Notes:Deck has moderate scaling on under side. Moderate scaling with exposed rebar in underside of deck between 3rd and 4th beams from south. 11/17- exposed rebar at numerous locations on underside of deck - 6/24/2019										
1080/1:Delamination/Spall/Patched Area	sq.ft	90	0	0	100	90	0	0	0	0
Notes:Scaling on underside of deck - 6/24/2019										
1120/1:Efflorescence/Rust Staining	sq.ft	11	0	0	100	11	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	86	0	0	100	86	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	240	0	0	0	0	100	240	0	0
1000/2:Corrosion	ft	240	0	0	0	0	100	240	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	36	0	0	0	0	100	36	0	0
Notes:Abutments have moderate spalling with exposed rebar and piling. Minor vertical cracks in both abutments. 11/17- exposed rebar at numerous location along west edge at abutment. - 6/24/2019										
1080/3:Delamination/Spall/Patched Area	ft	18	0	0	0	0	100	18	0	0
1090/3:Exposed Rebar	ft	18	0	0	0	0	100	18	0	0
330/3:Metal Bridge Railing	ft	30	0	0	0	0	0	0	100	30
7000/3:Damage	ft	30	0	0	0	0	0	0	100	30
Notes:11/6/2013 - Both bridge rails have been removed. - 6/24/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	59	0	0	100	59	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	59	0	0	100	59	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0

Remarks: 12/2/2015- The east abutment north side seems to be about 2 inches lower than the south side. - 6/24/2019**Alert Code 1:** No railing on bridge. - 6/24/2019**Alert Code 2:** 11/17- exposed rebar at numerous location on underside of deck and along west edge at abutment. - 6/24/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-147-10.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	72.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	SOUTH MEADOW TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	7 NORTH TEMPLE	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 29' 19.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 02' 38.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	201247.9 5378496.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 35 63 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 20 38 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	22 Gravel/Dirt	209 Posted in "Tons"	20 Tons
Age and Service		Appraisal	
27 Yr Built	1958 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	3 Intolerable - Correct
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	10 30 Year of ADT 2019	72 App. Rdwy. Alignment	4 Minimum Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	July 25, 2019
32 Approach Roadway Width	9 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	16.7 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/08/2019
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	09/13/2018
51 Bridge Rdwy Width - Curb to Curb	17.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	18.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 53-147-10.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	506	83	420	17	86	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	86	0	0	100	86	0	0	0	0
Notes:12/2/2015- Minor crack on underside of deck with efflorescence - 7/25/2019										
107/2:Steel Opn Girder/Beam	ft	240	0	0	0	0	100	240	0	0
1000/2:Corrosion	ft	240	0	0	0	0	100	240	0	0
Notes:rusting with some section loss on all beams - 7/25/2019										
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	36	0	0	100	36	0	0	0	0
1130/3:Cracking (RC and Other)	ft	18	0	0	100	18	0	0	0	0
Notes:Minor vertical cracks on Abutments. Moderate cracks at bottom of both abutments. - 7/25/2019										
6000/3:Scour	ft	18	0	0	100	18	0	0	0	0
Notes:moderate scour under structure adjacent to east abutment. - 7/25/2019										
330/3:Metal Bridge Railing	ft	59	0	0	0	0	100	59	0	0
1000/3:Corrosion	ft	59	0	0	0	0	100	59	0	0
Notes:rust with some section loss on all railing - 7/25/2019										
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	59	0	0	100	59	0	0	0	0
1190/3:Abrasion(PSC/RC)	ft	59	0	0	100	59	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
1130/3:Cracking (RC and Other)	each	4	100	4	0	0	0	0	0	0
Notes:Minor cracks in all wing walls. - 7/25/2019										

Alert Code 1: No end markers. moderate scour under structure adjacent to east abutment. - 7/25/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-147-24.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	83.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	WEST BANK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 4 SOUTH RAY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 17' 03.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 03' 11.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	199364.2 5355836.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 30 55 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 18 33 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	21 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1956 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	5 Above Tolerable
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	70 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 24, 2019
32 Approach Roadway Width	24 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.0 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	1 48 05/13/2019
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/27/2017
51 Bridge Rdwy Width - Curb to Curb	23.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 53-147-24.0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

Structure Number: 53-147-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Applicable	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	FARMVALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 6 SOUTH RAY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 14' 41.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 02' 42.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	199715.6 5351397.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	3		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 22, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	68.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	39.67 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, Borschel
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
Triple 12'x8' Precast RCB		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-147-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	204	100	204	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	75	3	25	1	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	1	0	0	100	1	0	0	0	0
Notes:Spall on top of NW wing wall 3" x 3" - 11/22/2019										

Remarks: _ - 11/22/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-148-11.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	49.00	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	SOUTH MEADOW TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	4 WEST 7 NORTH TIOGA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 29' 12.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 00' 58.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	203281.1 5378177.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	5 Fair
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	4 Poor
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Truss - Thru		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 30 55 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 20 38 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	205 Gravel/Dirt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1946 106 Yr Reconstructed -1	67 Structural Condition	4 Minimum Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	6 Equal Minimum
29 ADT	10 30 Year of ADT 2017	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 13, 2017
32 Approach Roadway Width	10 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inspection Dt	
34 Skew	0.00	Fracture Critical	Y 24 12/02/2015
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	14.1 Ft.	Other Special	N
48 Length of Max Span	49 Ft.	218 Channel Profile	1 48 05/09/2019
49 Structure Length	50.85 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.3 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.3 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	14.1 Ft.	213 Federal Aid Project Number	
52 Deck Width	15.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Donaldson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

Structure Number: 53-148-11.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	721	83	598	17	123	0	0	0	0
1120/1:Efflorescence/Rust Staining	sq.ft	11	100	11	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	sq.ft	43	0	0	100	43	0	0	0	0
113/2:Steel Stringer	ft	305	0	0	0	0	0	0	100	305
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
120/3:Steel Truss	ft	102	0	0	0	0	100	102	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
152/2:Steel Floor Beam	ft	52	0	0	0	0	100	52	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	36	0	0	0	0	100	36	0	0
330/3:Metal Bridge Railing	ft	102	0	0	0	0	100	102	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	102	0	0	100	102	0	0	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
7357/3:Pack Rust	each	1	0	0	100	1	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0

Remarks: NBI Remarks: No end markers. Minor spalls on underside of deck. The south abutment has minor scaling and spalls. The north abutment has minor to moderate scaling and spalls with exposed rebar. The nw and ne wingwalls have minor to moderate scaling and spalls with exposed rebar. Both abutments and all wings have minor vertical and diagonal cracks. Moderate spall on backside of ne wingwall. Minor spalls with exposed rebar on outside edge of deck typical both sides. Pack rust typical at all connection plates. Scaling with exposed piling southwest corner of s abutment. 12/2/15- Moderate/severe erosion behind all wingwalls.

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SEC 409

Structure Number: 53-148-28.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Applicable	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating		20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	FARMVALE TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 7 SOUTH RAY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 14' 10.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 02' 36.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	199784.7 5350461.9	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Not Applicable (P)	Load Rating and Posting	
	Not Applicable (P)	31 Design Load	
45 No. Spans in Main Unit	3		HL93 (AASHTO LRFD HL 93 design live load)
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2019 106 Yr Reconstructed	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	Unknown (NBI)
	5 Waterway - Under	68 Deck Geometry	Unknown (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	Unknown (NBI)
29 ADT	40 30 Year of ADT 2019	71 Waterway Adequacy	9 Above Desirable
109 Average Daily Truck Traffic		72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	8 Miles	36 Traffic Safety Features	N N N N
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	24 Ft.	90 Date of Last Inspection	November 14, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	20.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	78.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	39.67 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	01/01/1901
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, Borschel
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Not Applicable (P)
Triple 12'x8' Precast RCB		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-148-28.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	234	100	234	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: _ - 11/14/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-148-29.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	75.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	FARMVALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	5 EAST 9 SOUTH RAY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 13' 07.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 02' 21.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	200009.0 5348503.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	4 Poor
99 Border Bridge Struct No.	–	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	5 Fair
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 29 53 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating	HS 17 32 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	32 Asphalt	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	1962 106 Yr Reconstructed -1	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	6 Equal Minimum
29 ADT	45 30 Year of ADT 2019	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	8 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	June 24, 2019
32 Approach Roadway Width	26 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	23.6 Ft.	Other Special	N
48 Length of Max Span	36 Ft.	218 Channel Profile	1 48 05/13/2019
49 Structure Length	38.06 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	06/27/2017
51 Bridge Rdwy Width - Curb to Curb	24.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	24.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-148-29.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	904	0	0	50	452	50	452	0	0
Notes:12/2/2015- Spalls and map cracking on deck. Minor scaling on underside of deck. Asphalt overlay in 2016 2.5" and chipseal - 6/24/2019										
1080/1:Delamination/Spall/Patched Area	sq.ft	452	0	0	0	0	100	452	0	0
1130/1:Cracking (RC and Other)	sq.ft	452	0	0	100	452	0	0	0	0
107/2:Steel Opn Girder/Beam	ft	495	0	0	0	0	100	495	0	0
1000/2:Corrosion	ft	495	0	0	0	0	100	495	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	49	0	0	0	0	100	49	0	0
Notes:Random hairline cracks, moderate scaling on both Abutments with exposed rebar and piling. 11/17- moderate to severe scaling on abutments. - 6/24/2019										
1080/3:Delamination/Spall/Patched Area	ft	34	0	0	0	0	100	34	0	0
1090/3:Exposed Rebar	ft	15	0	0	0	0	100	15	0	0
330/3:Metal Bridge Railing	ft	75	0	0	100	75	0	0	0	0
Notes:Last guardrail post on each side of south end detached from rail. - 6/24/2019										
7000/3:Damage	ft	75	0	0	100	75	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	100	100	0	0
331/3:Re Conc Bridge Railing	ft	75	0	0	0	0	49	37	51	38
Notes:Moderate spalls on top west curb for entire length. west curb has exposed rebar. East curb has moderate to severe concrete deterioration with rebar exposed. - 6/24/2019										
1090/3:Exposed Rebar	ft	38	0	0	0	0	0	0	100	38
1190/3:Abrasion(PSC/RC)	ft	37	0	0	0	0	100	37	0	0
6000/3:Scour	each	1	100	1	0	0	0	0	0	0
Notes:Minor scour under structure. - 6/24/2019										
8401/3:Wings	each	4	0	0	100	4	0	0	0	0
Notes:Moderate scaling on all wingwalls. Random hairline cracks in all wingwalls - 6/24/2019										
1130/3:Cracking (RC and Other)	each	4	0	0	100	4	0	0	0	0

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-149-31.0

200 System Designation	3 – County Off	Classification	
201 Status	Structurally Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	42.50	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	HOFFLUND TOWNSHIP	37 Historical Significance	3 Possibly eligible for
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	BEAVER CREEK	102 Direction of Traffic	3 1-lane Br for 2-way
09 Location	6 EAST 11 SOUTH RAY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 10' 59.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 01' 01.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	201436.8 5344438.0	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	–	59 Superstructure	5 Fair
Structure Type and Material		60 Substructure	3 Serious
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	5 Bank Prot Eroded
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 31 57 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 19 34 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	05 Tons
Age and Service		Appraisal	
27 Yr Built	1933 106 Yr Reconstructed -1	67 Structural Condition	3 Intolerable - Correct
42 Type of Service	1 Highway - On	68 Deck Geometry	7 Above Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	1	71 Waterway Adequacy	4 Tolerable
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	5 Above Tolerable
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	2 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	May 02, 2019
32 Approach Roadway Width	9 Ft.	91 Designated Inspection Frequency	18 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	15.1 Ft.	Other Special	N
48 Length of Max Span	28 Ft.	218 Channel Profile	Y 48 09/09/2015
49 Structure Length	29.86 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/27/2017
51 Bridge Rdwy Width - Curb to Curb	15.4 Ft.	213 Federal Aid Project Number	
52 Deck Width	16.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Ralphs
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-149-31.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	463	0	0	100	463	0	0	0	0
1080/1:Delamination/Spall/Patched Area	sq.ft	463	0	0	100	463	0	0	0	0
Notes:Entire deck has spalled approximately 1 inch - 5/2/2019										
107/2:Steel Opn Girder/Beam	ft	240	0	0	0	0	100	240	0	0
1000/2:Corrosion	ft	240	0	0	0	0	100	240	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	33	0	0	0	0	0	0	100	33
6000/3:Scour	ft	33	0	0	0	0	0	0	100	33
Notes:Minor random cracks in abutments. scour under abutments - 5/2/2019										
331/3:Re Conc Bridge Railing	ft	59	0	0	100	59	0	0	0	0
1130/3:Cracking (RC and Other)	ft	59	0	0	100	59	0	0	0	0
6000/3:Scour	each	1	0	0	0	0	100	1	0	0
8401/3:Wings	each	4	0	0	50	2	50	2	0	0
1130/3:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
6000/3:Scour	each	2	0	0	0	0	100	2	0	0

Remarks: No end markers 12/2011 - Bridge closed, sign in place. 11/6/2013 No sign in place. 12/21/2015- SE corner has exposed rebar and piling, bridge is open. 9/26/2016 - Bridge closed by county and barricades and closed signs are up. 11/17- signs are up but barricades are down, County said barricades are down because "farmer needs to cross with hay" - 5/2/2019

Alert Code 3: Severe scaling on both abutments and all wingwalls with exposed rebar and piling. Northwest corner of west abutment deteriorated completely with exposed piling. Rip rap has been place in front of northwest corner of west abutment. - 5/2/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-151-30.0

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Major Collector
04 City	FARMVALE TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05351 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRY FORK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	9 EAST 10 SOUTH RAY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.300	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 11' 57.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 57' 27.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	205953.0 5345997.8	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	2	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	N N/A (NBI)	64 Oper. Rating	HS 41 75 Tons
108 Wearing Surface	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Membrane	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
Dk Protect	N N/A (no deck (NBI))	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	N Not Applicable	209 Posted in "Tons"	00 Tons
Age and Service		Appraisal	
27 Yr Built	2013 106 Yr Reconstructed	67 Structural Condition	9 Above Desirable Crit
42 Type of Service	1 Highway - On	68 Deck Geometry	N Not applicable (NBI)
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	9 Above Desirable
29 ADT	335 30 Year of ADT 2017	72 App. Rdwy. Alignment	8 Equal Desirable Crit
109 Average Daily Truck Traffic	14.00	36 Traffic Safety Features	N N 1 1
19 Bypass, Detour Length	4 Miles	113 Scour Critical	8 Stable Above Footing
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 13, 2017
32 Approach Roadway Width	25 Ft.	91 Designated Inspection Frequency	48 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	30.0 Ft.	Other Special	N
48 Length of Max Span	15 Ft.	218 Channel Profile	0 0
49 Structure Length	31.00 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	
	0.0 Ft Lt-Side	212 Structure Load Rated	11/30/2017
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	213 Federal Aid Project Number	
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Donaldson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	1 Not Required
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
DOUBLE 15 X 6 X 97" RCB			

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-151-30.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	194	100	194	0	0	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Replaced with a 15 x 6 x 97 foot double box summer 2013 11/17- minor spalling at joints

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-152-03.1

200 System Designation	2 – County On	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.40	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Major Collector
04 City	SAUK VALLEY TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	05351 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	WEST MCGREGOR	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.400	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 35' 33.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 55' 46.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	210282.5 5389597.5	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	8 No Major Problem
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	2	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41 75 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25 45 Tons
208 Dk Overburden	N Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built	2012 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	8 Equal Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	1,195 30 Year of ADT 2017	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	45.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	32 Ft.	90 Date of Last Inspection	November 13, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	40.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	40.0 Ft.	Underwater	N
48 Length of Max Span	12 Ft.	Other Special	N
49 Structure Length	25.00 Ft.	218 Channel Profile	N
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	03/21/2013
	0.0 Ft.	213 Federal Aid Project Number	COI-5351(054)
52 Deck Width	0.0 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Donaldson
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.
DOUBLE 12 X 5 X 118' PRCB			

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-152-03.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
841/1:Re Conc Culvert Precast	ft	236	100	235	0	1	0	0	0	0
8398/1:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: Bridge replaced with a double 12 x 5 x 118 foot prcb. 12/2/15- 4th barrel section from west in south barrel 1 foot spall with exposed rebar. Slight joint displacement throughout. 11/17- Spall in 4th barrel now 2' x 0.5', exposed rebar on east end of center wing. Minor spalling at lift holes

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-153-29.1

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	86.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	DRY FORK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRY FORK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	1 EAST 12 SOUTH TIOGA	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 13' 18.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 55' 20.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	208706.8 5348377.3	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	—	59 Superstructure	6 Satisfactory
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Steel	61 Chan. & Chan. Protection	6 Bank Slumping
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	1	41 Structure Open, Closed or Posted	P Posted for load
46 No. Approach Spans	0	63 Operating Rating Method	1 LF Load Factor
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating	HS 27 48 Tons
108 Wearing Surface	8 Gravel	65 Inventory Rating Method	1 LF Load Factor
Membrane	0 None	66 Inv. Rating	HS 16 29 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	24 Gravel/Dirt	209 Posted in "Tons"	25 Tons
Age and Service		Appraisal	
27 Yr Built	1964 106 Yr Reconstructed -1	67 Structural Condition	6 Equal Min Criteria
42 Type of Service	1 Highway - On	68 Deck Geometry	6 Equal Min Criteria
	5 Waterway - Under	69 Underclear. Vert & Horiz	N Not applicable (NBI)
28 Lanes on Structure	2	71 Waterway Adequacy	4 Tolerable
29 ADT	24 30 Year of ADT 2019	72 App. Rdwy. Alignment	2 Intolerable - Replace
109 Average Daily Truck Traffic	-1.00	36 Traffic Safety Features	0 0 0 0
19 Bypass, Detour Length	4 Miles	113 Scour Critical	U Unknown Scour
Geometric Data		Inspections	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 14, 2019
32 Approach Roadway Width	22 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	24.9 Ft.	Other Special	N
48 Length of Max Span	22 Ft.	218 Channel Profile	1 48 05/09/2019
49 Structure Length	23.95 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	0.0 Ft Lt-Side	212 Structure Load Rated	06/27/2017
51 Bridge Rdwy Width - Curb to Curb	24.9 Ft.	213 Federal Aid Project Number	
52 Deck Width	25.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	Ft.

Structure Number: 53-153-29.1

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/1:Re Concrete Deck	sq.ft	603	92	553	8	50	0	0	0	0
1085/1:Delamination	sq.ft	20	0	0	100	20	0	0	0	0
Notes:Bottom of deck has minor deterioration. - 11/14/2019										
1090/1:Exposed Rebar	sq.ft	30	0	0	100	30	0	0	0	0
Notes:11/17- Spalled concrete with exposed rebar on west side of deck above girder - 11/14/2019										
107/2:Steel Opn Girder/Beam	ft	312	0	0	0	0	100	312	0	0
1000/2:Corrosion	ft	312	0	0	0	0	100	312	0	0
515/2:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
215/3:Re Conc Abutment	ft	52	0	0	0	0	100	52	0	0
Notes:Both Abutments have moderate scaling with exposed rebar at bottom. Hair- line vertical cracks in both abutments at piling locations. Piling exposed at base of both abutments. 12/2011 - Moderate deterioration of abutments with some rebar exposed. - 11/14/2019										
1080/3:Delamination/Spall/Patched Area	ft	25	0	0	0	0	100	25	0	0
1090/3:Exposed Rebar	ft	26	0	0	0	0	100	26	0	0
6000/3:Scour	ft	1	0	0	0	0	100	1	0	0
Notes:Scour hole under bridge, water sitting from abutment to abutment - 11/14/2019										
330/3:Metal Bridge Railing	ft	49	0	0	100	49	0	0	0	0
1000/3:Corrosion	ft	49	0	0	100	49	0	0	0	0
515/3:Steel Protective Coating	sq.ft	100	0	0	0	0	0	0	100	100
331/3:Re Conc Bridge Railing	ft	49	0	0	100	49	0	0	0	0
Notes:Minor spalls at south end of east curb. - 11/14/2019										
1190/3:Abrasion(PSC/RC)	ft	49	0	0	100	49	0	0	0	0
8398/3:Slope Protection	each	2	0	0	100	2	0	0	0	0
8401/3:Wings	each	4	75	3	25	1	0	0	0	0
Notes:N.W. Wingwall has moderate spalling on top with exposed rebar. - 11/14/2019										
1130/3:Cracking (RC and Other)	each	1	0	0	100	1	0	0	0	0

Alert Code 2: 11/17- Spalled concrete with exposed rebar on west side of deck above girder - 11/14/2019

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North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-154-27.0

200 System Designation	3 – County Off	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	95.30	20 Toll	3 On free road
Identification		21 Maint Responsibility	County Hwy Agency
02 Highway District	Williston District	22 Owner	County Hwy Agency
03 County	Williams	26 Functional	Rural, Local
04 City	DRY FORK TOWNSHIP	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
4 County Hwy 1 Mainline	00000 0 N/A (NBI)	101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRY FORK CREEK	102 Direction of Traffic	2 2-way traffic
09 Location	12 EAST 7 SOUTH RAY	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 14' 27.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	102d 53' 50.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	210658.7 5350400.7	Condition	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	–	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	6 Satisfactory
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	8 Protected
Channel Beam		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	M 18 (H 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	P Posted for load
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 30 54 Tons
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 18 32 Tons
208 Dk Overburden	21 Gravel/Dirt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	25 Tons
27 Yr Built	1972 106 Yr Reconstructed -1	Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	6 Equal Min Criteria
	5 Waterway - Under	68 Deck Geometry	6 Equal Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT	25 30 Year of ADT 2019	71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	-1.00	72 App. Rdwy. Alignment	6 Equal Min Criteria
19 Bypass, Detour Length	6 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	U Unknown Scour
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	22 Ft.	90 Date of Last Inspection	June 24, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	22.0 Ft.	Underwater	N
48 Length of Max Span	29 Ft.	Other Special	N
49 Structure Length	30.84 Ft.	218 Channel Profile	1 48 05/09/2019
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	-1
51 Bridge Rdwy Width - Curb to Curb	26.9 Ft.	212 Structure Load Rated	09/19/2017
52 Deck Width	28.5 Ft.	213 Federal Aid Project Number	
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	Unknown (NBI)
		116 Minimum Navigation Vertical Clearance	Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: 53-154-27.0

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
110/3:Re Conc Opn Girder/Beam	ft	279	0	0	100	279	0	0	0	0
Notes:Random hairline cracks on outside face of both outside beams. Shrinkage cracks visible on bottom of all beams. 12/2/2015- rebar/rust spots on most of bottom girders. 11/17- Cracks on bottom on girder 2nd from south - 6/24/2019										
1130/3:Cracking (RC and Other)	ft	279	0	0	100	279	0	0	0	0
215/3:Re Conc Abutment	ft	59	0	0	0	0	100	59	0	0
Notes:Moderate scaling on both abutments. Minor spalls on abutments, with exposed rebar and east abutment. Moderate deterioration with exposed rebar and piling entire length of West abutment. - 6/24/2019										
1080/3:Delamination/Spall/Patched Area	ft	19	0	0	0	0	100	19	0	0
1090/3:Exposed Rebar	ft	40	0	0	0	0	100	40	0	0
331/3:Re Conc Bridge Railing	ft	62	87	54	13	8	0	0	0	0
Notes:Minor damage to south curb. - 6/24/2019										
7000/3:Damage	ft	8	0	0	100	8	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0
Notes:Minor spalls on all wings - 6/24/2019										
1080/3:Delamination/Spall/Patched Area	each	4	100	4	0	0	0	0	0	0

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WIL01

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	94.70	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Williston District	22 Owner	City/Municipal Hwy Agenc
03 County	Williams	26 Functional	Urban, Local
04 City	WILLISTON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 6 Business 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	1ST AVE. WEST WILLISTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	64d 10' 00.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	21d 57' 00.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 156289.2 5345602.0		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	7 Good
Structure Type and Material		60 Substructure	7 Good
43 Main Struct Type	Prestressed concrete	61 Chan. & Chan. Protection	7 Minor Damage
Tee Bm		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	1	MS 18 (HS 20) (live load for which structure was designated)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	2 AS Allowable Stress
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 36
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	2 AS Allowable Stress
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 17
208 Dk Overburden 32	Asphalt	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 1981 106 Yr Reconstructed		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	7 Above Min Criteria
	5 Waterway - Under	68 Deck Geometry	7 Above Min Criteria
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 1,200 30 Year of ADT 2019		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	4.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	0 0 0 0
Geometric Data		113 Scour Critical	3 SC - Unstable
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	42 Ft.	90 Date of Last Inspection	October 01, 2019
33 Bridge Median	0 No median	91 Designated Inspection Frequency	24 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	42.0 Ft.	Underwater	N
48 Length of Max Span	31 Ft.	Other Special	N
49 Structure Length	33.14 Ft.	218 Channel Profile	1 48
50 Curb/Sidewalk Widths	3.9 Ft Rt-Side	Chaining Date	11/01/2016
	3.9 Ft Lt-Side	207 Transporter Erector Routes and Sites	None
51 Bridge Rdwy Width - Curb to Curb		212 Structure Load Rated	01/01/1901
	41.7 Ft.	213 Federal Aid Project Number	PROJECT 12, 1980
52 Deck Width	49.9 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Isenhower, Borschel
54 Min Vert Underclearance	0 Ft. 0 In.	Navigation Data	
	N Feature not hwy or RR	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	99.9 Ft.	39 Navigation Vertical Clearance	0 Ft.
	N Feature not hwy or RR	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WIL01

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
12/3:Re Concrete Deck	sq.ft	1,378	100	1,378	0	0	0	0	0	0
510/3:Wearing Surfaces	sq.ft	1,378	100	1,378	0	0	0	0	0	0
109/2:Pre Opn Conc Girder/Beam	ft	364	99	360	1	4	0	0	0	0
7000/2:Damage	ft	4	0	0	100	4	0	0	0	0
Notes:Minor drift damage to bottom of t-beams at center of span. - 10/1/2019										
215/3:Re Conc Abutment	ft	105	83	87	17	18	0	0	0	0
1130/3:Cracking (RC and Other)	ft	8	0	0	100	8	0	0	0	0
Notes:Minor diagonal cracks at junction of abutment and wingwall, all four corners. - 10/1/2019										
6000/3:Scour	ft	10	0	0	100	10	0	0	0	0
Notes:10/19-North down drain has scour hole 2-3 feet deep below the channel depth South Down drain has scour hole 1-2 feet deep below drain - 10/1/2019										
330/3:Metal Bridge Railing	ft	66	100	66	0	0	0	0	0	0
Notes:Bridge railing could cause ramping, there are no impact heads. - 10/1/2019										
515/3:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
8401/3:Wings	each	4	50	2	50	2	0	0	0	0
Notes:Minor diagonal cracks at junction of abutment and wingwall, all four corners. - 10/1/2019										
1130/3:Cracking (RC and Other)	each	2	0	0	100	2	0	0	0	0
Notes:NW and NW Wings have cracking - 10/1/2019										

Remarks: Flap gates are missing on down drain ends. Minor settlement of sidewalk at SW, NE & NW corners. Heavy vegetation in channel. - 10/1/2019

Structure Number: WIL02

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Williston District	22 Owner	City/Municipal Hwy Agenc
03 County	Williams	26 Functional	Urban, Local
04 City	WILLISTON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 6 Business 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE DITCH	102 Direction of Traffic	2 2-way traffic
09 Location 32 ND AVE. WEST WILLISTON		103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 08' 28.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 40' 10.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 152667.4 5342528.3		Condition	
98 Border Bridge Unknown (P)	0.00 %	58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 2017 106 Yr Reconstructed		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 1,200 30 Year of ADT 2017		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	4.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	38 Ft.	90 Date of Last Inspection	November 20, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	40.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	44.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	08/24/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	SOIB-SOIA-7-002(157)017
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, Donaldson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
TRIPLE 14 X 6 X 46' RCB		116 Minimum Navigation Vertical Clearance	Ft.

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SEC 409

Structure Number: WIL02

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	138	100	138	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/17- Culvert Still under construction. Spall in west barrel 2nd from south at barrel wall. Spall at center barrel 2nd joint from the north east wall with exposed rebar. Minor spall at all lift joints. Hairline crack where wall meets ceiling. Cracking at wing walls at parapets.

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Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WIL03

200 System Designation	4 - Urban	Classification	
201 Status	Not Deficient	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	99.90	20 Toll	3 On free road
Identification		21 Maint Responsibility	City/Municipal Hwy Agenc
02 Highway District	Williston District	22 Owner	City/Municipal Hwy Agenc
03 County	Williams	26 Functional	Urban, Local
04 City	WILLISTON CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street 6 Business 00000 0 N/A (NBI)		101 Parallel Structure Designation	No bridge exists
06 Feats Intersect	DRAINAGE DITCH	102 Direction of Traffic	2 2-way traffic
09 Location	W FRONT STREET WILLISTON	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	0.000	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute		105 Federal Lands Highways	Not applicable
16 Latitude	48d 08' 23.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	103d 40' 09.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY 152683.9 5342387.6		Condition	
98 Border Bridge Not Applicable (P) 0.00 %		58 Deck	N N/A (NBI)
99 Border Bridge Struct No.	—	59 Superstructure	N N/A (NBI)
Structure Type and Material		60 Substructure	N N/A (NBI)
43 Main Struct Type	Concrete	61 Chan. & Chan. Protection	9 No Deficiencies
Culvert (includes frame culverts)		62 Culvert and Retaining Walls	9 No Deficiency
44 Approach Struct Type	Unknown (NBI)	Load Rating and Posting	
	Unknown (P)	31 Design Load	
45 No. Spans in Main Unit	3	22.5 (HS 25) or greater (live load for which structure was designed)	
46 No. Approach Spans	0	41 Structure Open, Closed or Posted	A Open, no restriction
107 Deck Struct Type	N N/A (NBI)	63 Operating Rating Method	1 LF Load Factor
108 Wearing Surface	N N/A (no deck (NBI))	64 Oper. Rating	HS 41
Membrane	N N/A (no deck (NBI))	65 Inventory Rating Method	1 LF Load Factor
Dk Protect	N N/A (no deck (NBI))	66 Inv. Rating	HS 25
208 Dk Overburden N	Not Applicable	70 Bridge Posting	5 At/Above Legal Loads
Age and Service		209 Posted in "Tons"	00 Tons
27 Yr Built 2017 106 Yr Reconstructed		Appraisal	
42 Type of Service	1 Highway - On	67 Structural Condition	9 Above Desirable Crit
	5 Waterway - Under	68 Deck Geometry	N Not applicable (NBI)
28 Lanes on Structure	2	69 Underclear. Vert & Horiz	N Not applicable (NBI)
29 ADT 1,200 30 Year of ADT 2017		71 Waterway Adequacy	8 Equal Desirable
109 Average Daily Truck Traffic	4.00	72 App. Rdwy. Alignment	8 Equal Desirable Crit
19 Bypass, Detour Length	1 Miles	36 Traffic Safety Features	N N 1 1
Geometric Data		113 Scour Critical	8 Stable Above Footing
10 Min Vert Clearance	99 Ft. 12 In.	Inspections	
32 Approach Roadway Width	38 Ft.	90 Date of Last Inspection	November 20, 2017
33 Bridge Median	0 No median	91 Designated Inspection Frequency	48 Months
34 Skew	0.00	92 Critical Feature Inspected / 93 Critical Feature Last Inpsction Dt	
35 Structure Flared	0 No flare	Fracture Critical	N
47 Total Horizontal Clearance	40.0 Ft.	Underwater	N
48 Length of Max Span	14 Ft.	Other Special	N
49 Structure Length	44.00 Ft.	218 Channel Profile	
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	Chaining Date	None
	0.0 Ft Lt-Side	207 Transporter Erector Routes and Sites	
51 Bridge Rdwy Width - Curb to Curb	0.0 Ft.	212 Structure Load Rated	08/24/2017
52 Deck Width	0.0 Ft.	213 Federal Aid Project Number	SOIB-SOIA-7-002(157)017
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	214 Delayed Inspection	Not Applicable
54 Min Vert Underclearance	0 Ft. 0 In.	216 Inspector	Isenhower, Donaldson
	N Feature not hwy or RR	Navigation Data	
55 Min Lateral UnderClear. - Rt	99.9 Ft.	38 Navigation Control	Permit Not Required
	N Feature not hwy or RR	39 Navigation Vertical Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	0.0 Ft.	40 Navigation Horizontal Clearance	0 Ft.
210 Culvert / 211 Description		111 Pier or Abutment Protection	1 Not Required
TRIPLE 14 X 6 X 85' RCB		116 Minimum Navigation Vertical Clearance	Ft.

January 03, 2020

North Dakota Department of Transportation

Bridge Inventory - Structure Inventory And Appraisal Sheet

SEC 409

Structure Number: WIL03

Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
241/3:Re Conc Culvert	ft	255	100	255	0	0	0	0	0	0
8398/3:Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/3:Wings	each	4	100	4	0	0	0	0	0	0

Remarks: 11/2017- culvert still under construction. some spalling at joints